EUROPEAN CLUSTER COLLABORATION PLATFORM

Final report of the ‘Towards Green Transition’ facility

Reporting on the 25 TGTF projects, success stories, feedback and lessons learned.

An initiative of the European Union

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EUROPEAN CLUSTER COLLABORATION PLATFORM

Strengthening the European economy through collaboration

Executive Summary

The years 2020 and 2021 were marked by the onset of the COVID-19 pandemic and the significant social and economic challenges that followed. The regional and local impact of this crisis has been highly heterogeneous, with significant implications for policy responses and, more importantly, building resilience at all levels.

Clusters are a major part of the European industrial landscape and their members, particularly SMEs, make up of a significant part of the European economy. With the evolving nature of the pandemic, cluster organisations played a critical role in mobilising support and reducing the negative economic and social impacts. Despite significant achievements, the past year has also unveiled resilience-related weaknesses and, more than ever before, the need for the adoption of greener, more resource efficiency and circular business models that are able to absorb external shocks.

In this context, the European Green Deal in particular has been leading the way as it aims to transform the EU into a more competitive economy through sustainability and resource-efficiency. The green deal is instrumental in strengthening the clusters, boosting the economy through green technology, and leading Europe forward in turning environmental challenges into opportunities and making the transition fair and inclusive for all. Given the onset of the challenges related the pandemic, the European Cluster Collaboration Platform responded rapidly to pave the pathway for green and resilient capacity building of clusters.

The Towards Green Transition Facility was designed with the goal of helping cluster organisations to address these and other related needs. A survey, conducted in January-February 2021, confirmed and underlined the urgent need among clusters to adapt their (and their members') business models and skills related to resilience and greening. With a total of 200 responses received, of which 147 represented a cluster organisation registered with ECCP, the large majority of respondents (172 out of 200) expressed interest to acquire advisory and consulting services in relation to the green transition and resource efficiency. Based on these results, the Towards Green Transition Facility was designed with the overall objective of enabling the ECCP clusters to promote and support green transition practices amongst their members. Between March and November 2021, the facility selected, designed and implemented 25 separate projects that focused on addressing some of the most prominent green transition needs of more than 30 European clusters and their members, especially SMEs.

The TGTF projects spread across a large variety of cluster characteristics, sectors, and countries. In terms of countries, the projects spread across 11 EU Member States with a particular focus on southern and eastern regions of the EU, highlighting a higher need in these countries for strengthening the existing regional support ecosystems. The sectors involved extended from agro-industrial activities (e.g. livestock processing, aquaculture) to traditional industries (e.g. textiles, plastic, wood products), frontier technologies (e.g. biotechnology, information technologies, advanced materials) and a variety of services (e.g. business services, creative industries, sports). Cluster organisations also varied in size, with some smaller ones consisting of about 35 members, while others ranged from medium to large, representing hundreds and even thousands of members and SMEs.

As per the needs assessment, clusters reported a variety of needs related to the green transition in their specific contexts. This included bottle necks such as the lack of necessary internal capabilities and among their members, the lack of access to relevant tools, limited understanding of business models, lack of information about regulations and insufficient awareness about relevant technological solutions. Given this diversity of challenges, each project was customized to the specific challenges and needs of the cluster or consortium. From the outset, the TGTF business advisors, together with the project coordinators and cluster managers, worked on identifying and prioritising the needs and actions in each collaboration.

The main forms of advisory services offered were workshops, webinars, guidance documents and direct consultancy to members and cluster managers. They offered a variety of outputs to cluster managers and SMEs. These included the development of business models, trainings, manuals, roadmaps, case studies and knowledge dissemination environments, among others, focused on their green transition and sustainability-related challenges. The green transition topics approached, in broad terms, included the greening of business processes, adoption of circular economy solutions, the development of environmentally-friendly innovations, increasing energy efficiency and lowering emissions.

Notwithstanding the challenges posed by this significant heterogeneity, the feedback collected from cluster managers regarding the services offered was largely positive. Managers frequently highlighted the impact of the facility on crucial areas of the clusters' activities and operations. A number of clusters engaged SMEs in training on adoption of green transition practices. In addition, a number of areas and tools were developed and adopted by clusters. This included long-term sustainability strategy, circular economy action plans, green market engagement, toolkits for resource efficiency practices amongst others. Clusters particularly highlighted the ease of the application process, the relevance and usefulness of the facility, and largely indicated their interest in engaging in like-minded initiatives in the future.

In parallel to the implementation of the 25 projects, three cross-cutting synergy building webinars were offered to all business advisors and cluster managers involved in the facility to deepen the synergies and create a community to share knowledge and best practices. Based on the analysis of the ongoing documentation produced by each project, the TGTF coordination designed a series of activities focused on disseminating the findings, promotion of synergies, delivering additional expertise and engaging the TGTF participants to create a community of practitioners to continue the drive towards sustainability beyond the end of the facility.

An average of 50 participants participated in each of the three webinars. The events combined presentations by experts, sharing of experiences and insights shared by coordinators and clusters managers, and interactive sessions between participants. The issues approached included cluster financing, sustainable business modes, and the development of roadmaps for the green transition of clusters. Overall, clusters and experts expressed positive impressions of the webinars and their usefulness and relevance. Moreover, the high quorum throughout made clear the high interest among experts and cluster managers in engaging and creating synergies during the facility.

The design and implementation of the facility produced a sizeable legacy for its participants and offered important lessons, in particular on strategic and operational aspects, that could contribute

towards enhancing the impact of future programs with similar characteristics. Twelve key lessons were identified along the four main phases of the facility – preparation, selection, implementations and closing – and are presented and explained in the closing chapter of this report. These 12 lessons are summarised hereunder:

- #1 – Understanding the needs of the target group through a needs assessment with the target group for the advisory service to better understand their particular challenges and thereby to ensure interest as well as positive impacts by providing a targeted support that addresses actual needs.
- #2 – Facilitating applications by providing sufficient guidance documents, opportunities for Q&A and easy-to-follow application procedures that put no unnecessary burden on applicants, while still providing a good overview on the applicant's current status, their ambitions, the expected impact and what type of advisory service they require.
- #3 – Addressing individual needs at cluster or company level through individual learning paths that are created and agreed upon in project specific work plans for each of the advisory projects. The participant, the expert as well as the overall facility coordination should be involved in the development of these work plans.
- #4 – Planning for back-up with additional advisors and backup participants to ensure that quick replacements can be found should an expert or participant become unexpectedly unavailable.
- #5 – Use of interviews to confirm selections of advisors by checking not just their credentials, but also their creativity in coming up with solutions that address the participant's needs as well as their drive and spirit in encouraging change.
- #6 – Community building to complement individual learning paths through joint sessions and thereby allow participants to learn from each other and exchange on lessons learned and activities implemented in order to provide encouragement and new ideas.
- #7 – Integrated and flexible progress monitoring to allow participants to focus on training activities while keeping tabs on their progress through dedicated project coordinators that have an understanding of the timeline of the individual projects they coordinate as well as of the overall timeline of the facility.
- #8 – Duration of business advisory services suited to the complexity of the facility, but usually it ranges from 3 to 9 months with shorter durations being useful where needs and activities are clear from the start. For longer advisory services, intermediate targets should be set in order to guarantee implementation from day 1.
- #9 – Targeted support to SMEs and their supporting frameworks such as cluster organisations to build capacity for change as SMEs often lack the capacities (time, capital, knowledge) to induce change on their own.
- #10 – Taking into account the heterogeneity of the clusters in the design of advisory services as these organisations face different needs and have different capacities available to work with advisors.
- #11 – Planning from the start on how to create impact beyond the facility to ensure a lasting impact that goes beyond the duration of the facility by encouraging advisors and participants to develop also forward looking activities such as roadmaps as well as activities that include other parties (e.g. cluster members) to ensure knowledge is disseminated.

- #12 – Celebrating achievements and remind participants of their learnings through a closing event or a certificate with the aim of encouraging them to make use of their learnings and to continue their growth.

We trust that this report offers some important pathways for deepening the skills of the cluster community, and provides some lessons, ideas and practical tips for practitioners, advisory service providers and clusters at large.

01

Introduction to the ‘Towards Green Transition’ Facility

A summary of the background, conception, set-up and implementation of the facility.

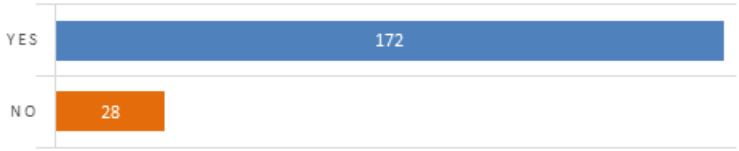
1. Introduction to the 'Towards Green Transition' Facility

The year 2020 marked a significant moment in history with the onset of COVID-19 pandemic, global supply chain disruptions, coupled with significant social and economic challenges. The regional and local impact of this crisis has been highly heterogeneous, with significant implications for policy responses and, more importantly, building resilience at all levels.

Clusters are a major part of the European industrial landscape and their members, particularly SMEs, remain the lifeline of the European economy. With the evolving nature of the pandemic, the cluster organisations played a critical role in mobilising support and pushing forward. However, the evolving situation related to COVID-19 pandemic also underlined significant challenges related to the resilience of clusters. More than ever before, clusters and their members need to become resilient to external shocks and at the same time adopt greener, more resource efficiency and circular business models that can not only absorb future shocks but sustain and grow.

In light of this challenge, in December 2020, the facility was redesigned to address the current issues related to resilience-building and sustainability in clusters. The core objectives and overall approach adopted by the facility to address these issues were based on a needs assessment survey. This survey, which aimed at assessing clusters' needs related to green transition and resource efficiency, was launched on 25 January 2021 and remained open for responses until 5 February 2021. With a total of 200 responses received, of which 147 represented a cluster organisation registered with ECCP, the large majority of respondents (172 out of 200) expressed interest to acquire advisory and consulting services in relation to green transition and resource efficiency.

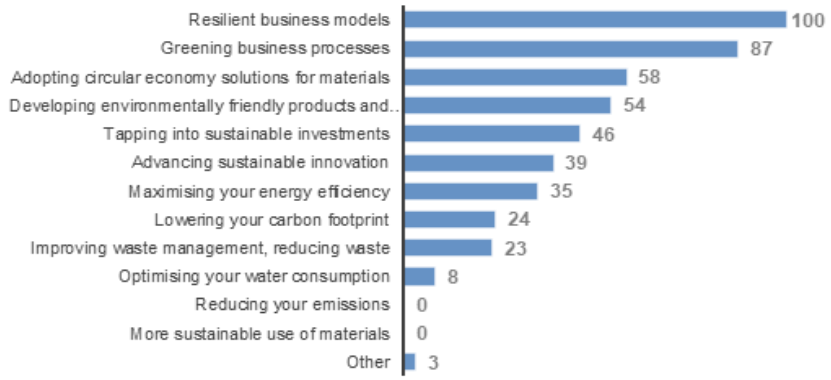
Figure 1: A majority of clusters keen to receive advisory services to support their greening efforts



Question: Would you be interested in receiving advisory/consulting services to support your cluster's greening efforts? (n=200)

The survey also mapped the areas in which consulting services were needed the most by clusters in the target group. The development of resilient business models and the greening of business processes were the most cited needs by the respondents to the survey. Other areas largely cited were adopting circular solutions for materials, the development of environmentally friendly products and a series of other topics related to achieving higher sustainability in production and final products.

Figure 2: Resilient business models, greening business processes and adopting circular economy solutions for materials were the top three most relevant advisory services to clusters



Question: Please select the top three advisory/consulting services that are most relevant to your cluster in order to support greening efforts of your cluster members (in particular SMEs) (n=170)

Based on these and other inputs from the survey, which by and large confirmed the existence of widespread needs among clusters regarding resilience and greening, the Towards Green Transition Facility was designed with the **overall objective of enabling the ECCP clusters to promote the Green Transition amongst their members**. The new design focused on a set of intended benefits, which included the following items amongst its main goals:

- Improve resource efficiency of European SMEs within ECCP clusters;
- Support green entrepreneurship through hands-on technical advice and support
- Exploit the opportunities of greener and more efficient value chains; and
- Facilitate market access for green SMEs within clusters.

To achieve the objective and intended benefits, a practical approach for TGTF was devised. This approach resulted in an operational model to implement and monitor tailored projects according to the needs and challenges of each cluster. In the paragraphs below, we present and briefly explain the main steps taken in this process.

Setting up a pool of Business Advisors. A call for developing a rooster of Business Advisors was launched and disseminated widely amongst stakeholders, including the Ecorys network of experts, JRC Seville, and DG GROW colleagues working on the European Resource Efficiency Knowledge Centre (EREK), amongst others.

Launching of a Call for Expressions of Interest. A call for expressions of interest for clusters was launched in parallel outlining the clusters' ambitions and needs, with the following set of criteria:

- Applying clusters had to be part of ECCP;
- The applicants had to consist of 1 or multiple clusters from the same sector;
- The applicant had to demonstrate a specific need for resource efficiency and commitment to adaptation;
- The clusters had to demonstrate that the requested knowledge/training will be applicable/transferrable to SMEs;

- The project had to demonstrate how the cluster will ensure knowledge transfer to at least 10 SMEs in the course of the project implementation.

Moreover, the cluster applicants were asked to provide a clear outline for added value and business case for obtaining the support (for example, step up towards a resource efficiency strategy).

Designing of the application process. A simplified application process was developed coupled with a series of sessions to increase the engagement of clusters. In order to motivate applicants, the application included a user-friendly and simplified two-pager for the business case. Following the selection criteria, the application forms asked applicants to introduce their cluster, describe the clusters green ambitions, their members' needs, identify challenges and indicate the type of advisory services needed, as well as the expected impact on the clusters and SMEs.

Screening and selection. In a pre-assessment phase, the applicants were scored against three criteria (needs assessment, feasibility, expected impact). In the second round of assessments, our selection committee reviewed more closely the remaining applications. Based on this evaluation and the overall scoring, 25 projects, with 37 involved clusters, were selected, with the remainder being marked as backup projects.

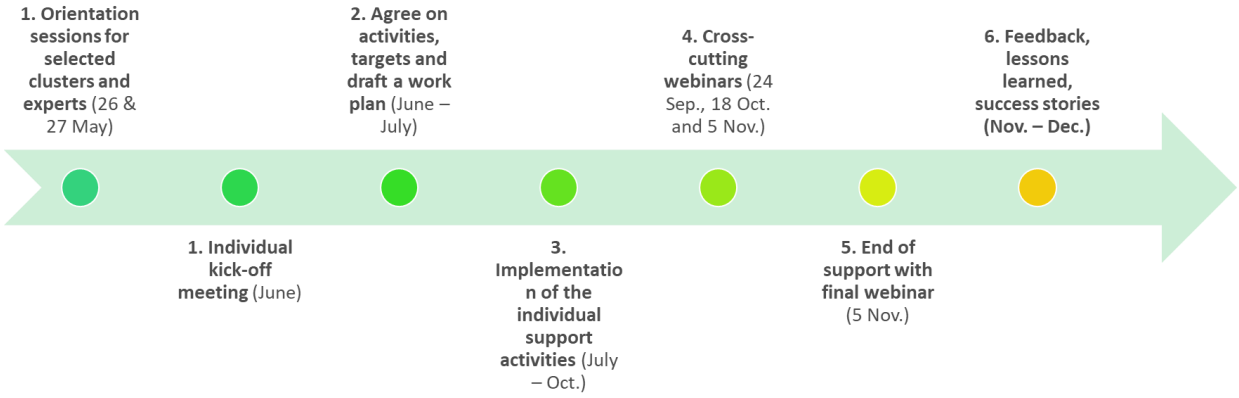
Implementation. In May 2021, the winners of the facility were announced on the ECCP website[1]. Clusters received their recommendation letters, which included their overall score. The letter also summarised the needs and targets identified and, based on that, proposed possible activities to be implemented. In this message, clusters were also invited to an orientation session, which took place soon after.

Finally, in June 2021, the projects began, and the first kick-off meetings took place. The first month of the collaborations was in general dedicated to the design of activities and agreement on the work plan among cluster managers, business advisors and coordinators from the TGTF team. This was translated into a Cluster Services Agreements (CSA) signed by the cluster representatives. Thereafter, the effective implementation began and continued until November. Throughout this period, the TGTF coordination organized a series of cross-cutting synergy webinars with the business advisors and cluster managers, with the objective of disseminating findings and opportunities, and delivering additional expertise to the clusters.

Figure 3 presents the timeline of the implementation phase from kick-off to the end of the projects, in November 2021, and to the conclusion of the facility itself thereafter.

[1] See: https://clustercollaboration.eu/content/towards-green-transition-facility-winners-are-announced/

Figure 3: Timeline of the 'Towards Green Transition' Facility



In the following chapters, we present the Towards Green Transition Facility in greater detail. We start by presenting an overview of the activities implemented (Chapter 2) and a summary of each individual project (Chapter 3). Thereafter, we present the key findings from the cross-cutting webinars (Chapter 4) before closing the report with a presentation of the key lessons learned from the implementation of the facility (Chapter 5).

02

An overview of the ‘Towards Green Transition’ Facility

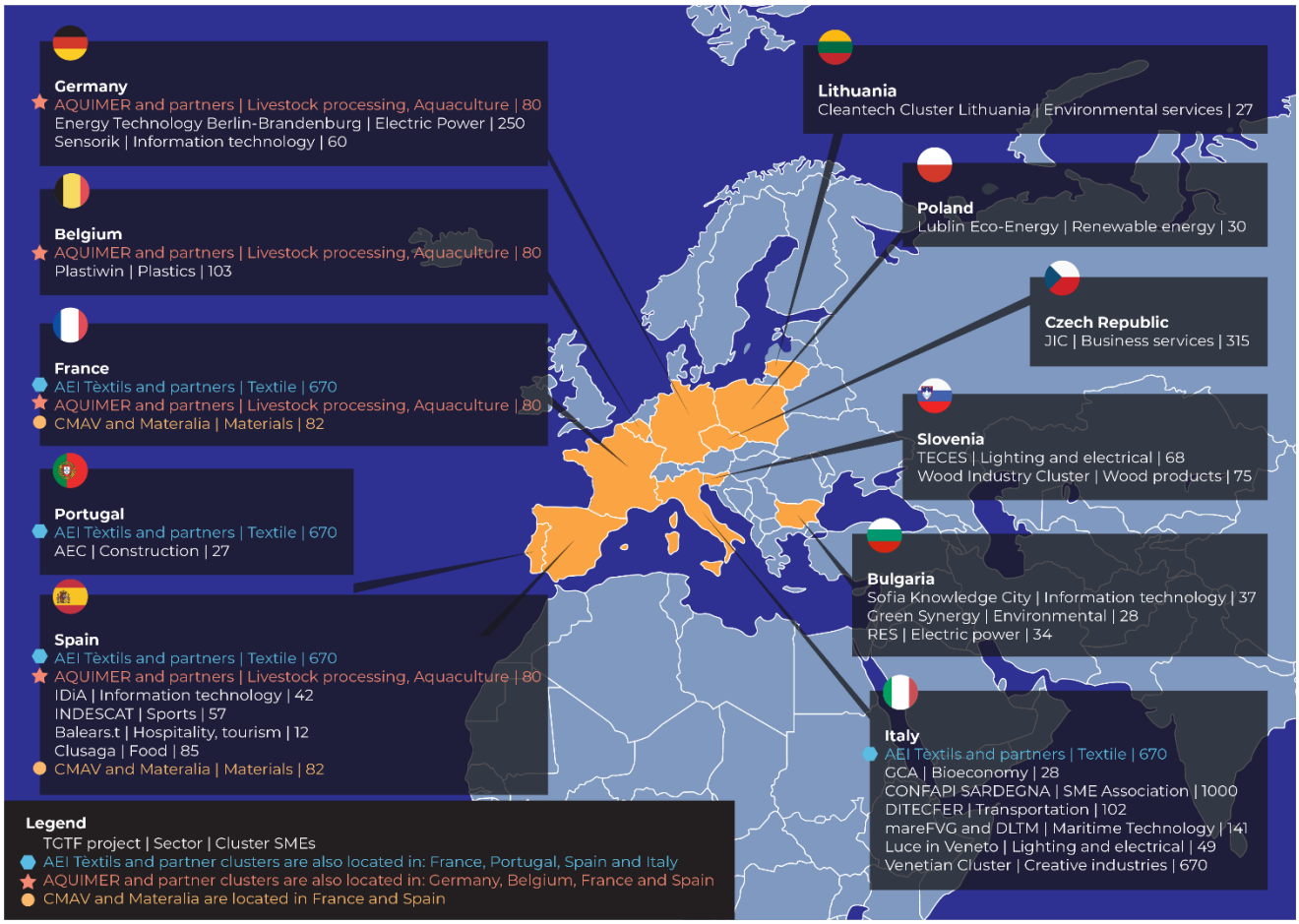
Cross-cutting themes and success stories from across all 25 TGTF projects

2. An overview of the 'Towards Green Transition' Facility

As outlined above, following selection and award, the facility supported over 30 clusters through 25 projects. In this chapter, we present a cross-cutting overview of these projects. First, we offer a summary of the key services and outputs produced by the projects. Thereafter, in different subsections, we briefly review their characteristics under three different perspectives: the common challenges faced by clusters and SMEs, the green transition topics approached, and the types of support services offered. This overview is intertwined by text boxes that offer cases of selected project activities that exemplify the services, challenges, topics, and outputs approached throughout the facility.

Before moving to this overview, we present in Figure 4 a map of the clusters that participated in the 25 projects. The map offers a glimpse at the variety of economic sectors involved, the differences in the size of the clusters and the number of SMEs potentially reached by them. Moreover, we see that the projects spread across 11 EU Member States with a particular focus on southern and eastern regions of the EU, highlighting a higher need in these countries for strengthening the existing regional support ecosystems.

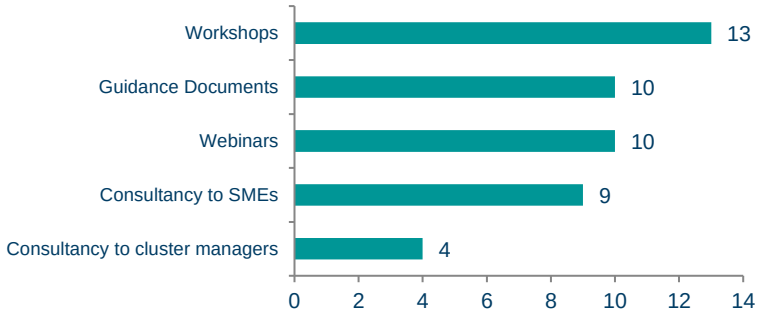
Figure 4 Map of the participating clusters and the 25 TGTF projects



2.1 Overview of services and outputs

The figure below depicts an overview of the services offered in the facility - described further in section 2.4 - according to the number of projects that developed each service. It is possible to see that workshops were the most sought-after service by cluster managers and members, being offered in 13 projects. Webinars and several types of guidance documents were provided in 10 projects, while 9 projects involved direct consultancy to selected SMEs. In 4 projects, direct consultancy to the managers of the clusters was the focus of the services. Since most projects involve more than one type of service, the total number is greater than 25.

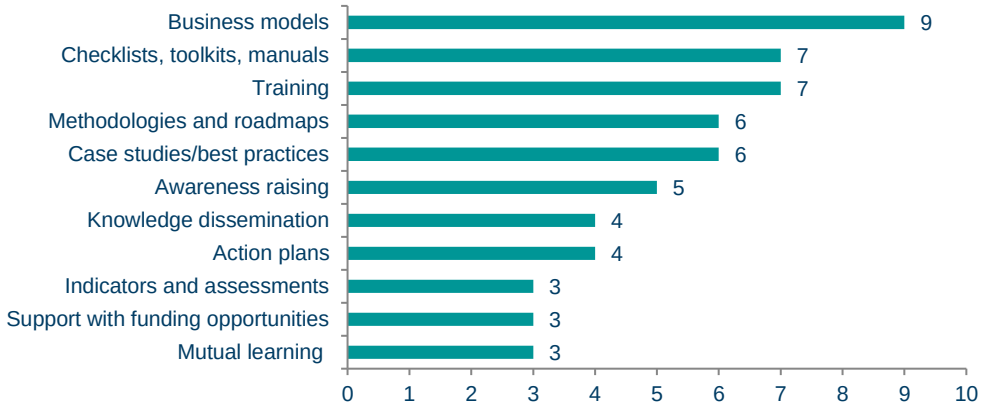
Figure 5: Number of projects that offered the specific type of service



These services are broader activities provided by the facility that served to deliver a variety of outputs, which represent the end-products produced by these collaborations. In the boxes below, several examples of how the services were used to deliver these outputs are presented. For example, several projects involved the use of direct consultancy to SMEs to deliver training, produce case studies, or develop business models for these enterprises. Some projects adopted workshops to disseminate knowledge, offer training or identify best practices within the clusters. In parallel, other projects had activities focusing on developing useful documents for clusters and SMEs of documents, such as checklists and manuals.

The approach used to produce these outputs changed according to the perception and preference of the cluster managers and business advisors. Figure 6 below gives an overview of the number of projects that developed a set of key outputs.

Figure 6: Number of projects that provided the specific type of output



We can see that the facility delivered a large and varied number of outputs. Beyond the ones already cited, these also included awareness-raising activities, methodological documents and roadmaps, support for clusters and SMEs to access funding opportunities, and the development of sustainability indicators to be used by clusters and SMEs. The most common output was the development of business models, followed by several varieties of training and the preparation of checklists, toolkits and manuals for cluster managers and SMEs. In a context of great diversity among clusters and SMEs in all dimensions (e.g. countries, sectors, challenges, capabilities, etc.), this depth and breadth also showcases the flexible and tailored approach of the facility in supporting this entrepreneurial ecosystem towards becoming greener and more sustainable.

2.2 Needs and main challenges faced by the clusters

The clusters that applied to the Towards Green Transition Facility indicated a wide variety of challenges for achieving and promoting more sustainable business practices among SMEs in their areas of activity. These obstacles were related to several aspects, which included the internal capabilities of clusters and their members, the lack of access to relevant tools and business models, or the lack of information about regulations and relevant technological solutions. At the beginning of the execution of each project, the detailed assessment of the needs of each cluster by business advisors and coordinators frequently prioritized specific aspects or identified new ones. Nonetheless, these self-assessed barriers remained the starting point in the design of each project and the decision to use specific service types. In this subsection, we summarize the key challenges initially indicated by the organizations that participated in the facility.

Lack of the internal capabilities in the cluster

Clusters commonly identified the need to improve their internal capabilities or acquire new skills to assist SMEs and provide their members with sustainability-related services and solutions. They indicated different ways to do this according to their initial assessment of the main needs of enterprises in their sector regarding green transitions. For example, some clusters indicated the need to help their members by supporting SMEs in building business models through mentorship and business skills development. Others pointed at the need of acquiring skills to promote, manage and monitor sustainability practices in their sectors. Still others stated the need to improve their internal

organisational structure or for more profound technical knowledge to assist SMEs in search of technological solutions.

Box 2.1: RES Cluster – Strengthening industrial stakeholder support capacity in the renewable energies sector

Challenges commonly faced by Cluster organisations are multiple: understanding the actual needs of local industry stakeholders, finding innovative, impact-driven, and yet accessible ways to deliver support solutions to SMEs, and securing the technical, financial and human resources to bring forward these solutions. The RES Cluster's ResInTech Demo Centre pilot project mission is to support regional industrial players in the renewable energy sector in their business model transformation, skills acquisition, and investment challenges. However, the Cluster's project had been facing many of the listed challenges.

The TGTF cooperation with the RES Cluster focused on strengthening the Cluster's own capacity to support its members through both the development of an effective business model for the ResInTech Demo Centre, and the identification of the Cluster's areas for improvement as a working organisation, including action planning for key business development activities. To meet both objectives, the core of the support consisted of benchmarking the Cluster and its Demo Centre's business and supporting this structure with existing best practices – clusters, companies and initiatives – at national, European and global levels.

Insights collected from peer clusters and contextualised in the national reality of the RES' operations contributed to the overall benchmarking exercise and follow-up roadmap development delivered by the TGTF, that provided the Cluster with targeted feedback on its current operational model and clear actions for development and effective impact-delivery in the near future.

Lack of key technical knowledge among cluster members, notably SMEs

A frequent challenge indicated by clusters concerning green transitions was the absence of key knowledge about technological solutions or the lack of skills to develop solutions that promote greening amongst their members, especially SMEs. These shortcomings were connected to the main technological topics of the TGTF facility – circular economy, energy efficiency, use of materials, product waste, emissions, and carbon footprint – and translated into a broad set of issues. These ranged from the knowledge necessary for achieving incremental improvements in the sustainability of products and production processes to the understanding of technological trends that could have an impact on the sector. Participants indicated the need for firms to get acquainted with solutions for water and energy efficiency and ways to apply cleaner energy sources to production processes. Other clusters indicated efficiency or life cycle-related issues in production materials, components and final products that were left unaddressed by firms due to the lack of skills. Finally, some organizations pointed to new technological trends impacting their sectors that posed problems and opportunities to their members, such as digitalisation.

Box 2.2: Providing one-on-one coaching to LGCA's SMEs to adopt circular economy solutions for materials

As companies that are part of the LGCA cluster adopt circular bio-economy strategies and practices, they may also need to change or adapt their business model to create more added value.

The cluster manager and business advisor teamed up to support SMEs with technical advice to create new circular business models with the objective of ensuring that products retain the highest level of value for as long as possible. Since each SME focuses on a specific sector and a specific value-chain segment, the individual case needed to be assessed to provide valuable support. To reach such a goal, a series of one-on-one coaching sessions took place to strengthen the competitiveness of their business model, identify solutions to increase the circularity of bio-based processes, and provide advice on the use of materials.

The cluster manager selected ten different SMEs and, through 3 individual coaching sessions, together with the business adviser, produced company profiles – teasers summarising value proposition, position on the market, and financial needs – of SMEs in adopting circular economy solutions for materials. This exercise provided insight into SMEs' different business models, with targeted advice on how to increase their "circularity". Furthermore, those innovative biotechnology SMEs used those company profiles to pitch their sustainable business models in front of investors, financial consultants, and venture capitals in the *Bioeconomy Regional Investment Forum*, also supported by the TGTF.

Lack of tools, checklists, and examples of business models for green solutions among cluster members

In several cases, the obstacles to achieving higher sustainability among cluster members were connected to the lack of awareness by enterprises about viable business models for green solutions; or to the lack of skills inside firms to develop such business models. Naturally, this type of barrier was more crucial in the case of smaller firms, given their common lack of resources and lower access to specialised advisory services. Some clusters indicated enterprises needed to learn how to deal with the several aspects of developing a business model, such as market assessments and expected returns. Others pointed to innovation-related challenges, such as developing green business models for public sector companies in the context of smart cities or consistent business models to introduce new technologies to the market and obtain funding. Frequently, clusters indicated the need for SMEs to get acquainted with business models for sustainable solutions applicable to their activities in topics such as circularity, energy efficiency, and the use of materials.

Box 2.3: Understanding and setting actions for the circular transformation of SMEs' business models

The primary need identified among the engaged SMEs in the Venetian Cluster was to understand what creating circular supply and value chains implies, and what innovative approaches to do business can be implemented in this respect. Addressing this need required the creation of better knowledge foundations about circular economy approaches among Cluster members and inspiration for co-creation actions for integrated solutions with stakeholders across their specific value chains. It also required understanding how to bring forward such changes in business practices in operational terms.

Therefrom, the training webinars hosted by the TGTF business advisor focused on the following topics: the implications of sustainability and how to assess it at a company level; general and sector-specific good practice examples of circular economy innovative approaches; action planning design for the circular transformation of businesses. A fourth webinar explored the specific topic of CO_2 offset for companies.

The training sessions offered the participating SMEs a better understanding of the different dimensions of sustainability, including application examples, tools and methodologies for the assessment of Sustainable Development Goals and CO_2 footprint. They also provided existing best practices of circular business models in the sectors of engaged SMEs, namely the energy, logistics and transportations and civil and industrial cleaning sectors. Finally, they explored how to design participatory action plans, covering the identification, mapping and prioritisation of stakeholders, the problem definition and analysis, and the action setting and assessment.

Need to develop entrepreneurship, disseminate of information and other challenges

Besides the three categories explained above, which broadly cover the most common challenges identified by the clusters, other important needs were cited during the initial phase of the facility. A few clusters identified the need to develop a stronger entrepreneurial attitude among cluster members or the need for a change of "culture" and attitudes towards sustainability. Others indicated the need to raise awareness and disseminate sustainability-related ideas among enterprises. Finally, one participant recognized the need for understanding better the requirements and concepts used by regulators as a major challenge for its members.

Box 2.4: Community building to foster sustainable innovation

Cluster Energy Technology Berlin-Brandenburg (ETBB) is fostering innovation for the clean energy transition. Sustainability is thus already part of the cluster's mission and self-understanding. Nonetheless, questions remain: what can the cluster management offer to the cluster's SMEs to stay ahead of the curve and to become pioneers of the green transition? And how can this goal be linked with the cluster's main mission?

Jointly with the TGTF expert, the Cluster ETBB conducted a deep-dive workshop and a cluster survey (99 responses in total) to find out the status of the companies regarding Green Transition and their main challenges. This initiative enabled the cluster to find out that there is a group of about 25 active cluster players already aware of and tackling green transition. These could become sustainability enablers for the cluster. Thus, in the framework of Cluster ETBB, it became clear that the key to promoting Green Transition would be to leverage this existing potential by creating a space for this group to come together, to interact and to learn from each other and thus become a true sustainability community within the cluster.

Cluster ETBB role was to install the space, motivate the core group as well as additional cluster members to join, moderate the group and provide impulses through both a knowledge repository and "town hall calls" on key topics of the green transition, such as the EU Taxonomy, transparent supply chains, funding programs for sustainability or SDG-based business strategies. Cluster ETBB goal is to link this core group of sustainability enablers with problem owners who are attracted by the content provided and who are actively looking for solutions. In doing so, Cluster ETBB can initiate sustainability-based innovation projects, thus contributing to the green transition of the Berlin-Brandenburg region.

2.3 Main green transition areas supported

TGTF supported the transition of European clusters and enterprises to greener processes and products in several core sustainability areas. As seen above, the challenges identified for clusters and SMEs almost invariably extended across multiple topics. The importance of each area also varied according to the needs and, crucially, the sector of activity of the SMEs. The cluster needs self-assessments, as seen above, but also open questionnaires, surveys and meetings with the cluster managers and SMEs were the main tools used to identify these areas. These topics were not mutually exclusive, and most projects addressed two or more themes simultaneously. For example, the greening business processes many times involved also promoting circular solutions. We summarize below the main green transition areas approached by the TGTF projects.

Greening business processes

One of the focus areas of the facility was in the development of greener business processes. The topics approached in this area offered guidance to members towards increasing resource efficiency and sustainability in various aspects of their production processes, focusing on the overall reduction of environmental impacts. These included, for instance, increasing awareness and offering solutions to reduce water and heat consumption in production, reducing the waste of materials, increasing reuse along the value chain, using sustainable materials, and redesigning production processes to become more sustainable.

Box 2.5: Supporting Materalia and CMAV's SMEs implementing circular economy principles

The members of both clusters are aware of the urgency of implementing sustainable practices in the manufacturing sector

but lack the capacity and capabilities to do so. Materalia (France) and CMAV (Spain) realized that the cluster organisations are the adequate tools to support SMEs in this upskilling and reskilling process. However, to smooth the knowledge transfer process, clusters' staff need to be properly trained, advised, and supported by specialized consulting services. Moreover, it is difficult to identify what are the issues that can be of broad interest and utility for as many SMEs as possible.

In order to overcome this barrier, meetings between the clusters' staff and the experts of the facility took place in order to identify what were the common barriers that their SMEs were facing. During these meetings, two open innovation-based virtual workshops were prepared to address identified issues/challenges. The two workshops aimed to identify the best approaches to circular economy using the participants' feedback. Although one workshop was focused on metallurgy and the other one on wind energy, the two workshops were complementary to each other.

The workshops, held on 5 and 6 October, allowed members to discuss the needs of the circular economy and how the materials sectors could contribute to it. The main challenges and barriers that need to be addressed to apply circularity to these sectors were also identified. This was done through different exercises, among which was the development of scenarios in which the wind energy industry would be fully circular – this helped participants to identify what steps must be taken to reach a desirable future.

Adopting circular economy solutions in products

The facility maintained a strong focus on designing circular economy solutions, which proved to be an area of high interest for clusters and SMEs. This topic frequently covered not only production processes but the life cycle assessment (LCA) of products and services, therefore approaching solutions to control the environmental impact of final products in their use and disposal. The interest in circular solutions was widespread across sectors, with clusters and SMEs involved in construction, textiles, energy, lighting, and even tourism, among other sectors, interested in understanding and applying the concept to their businesses.

Box 2.6: From basic understanding to collaborative circular economy solutions.

LUBELSKI KLASTER EKOENERGETYCZNY

The main challenge faced by the members of the Eco Energy Cluster in Poland was its members' lack of experience in using circular economy solutions and unequal level of understanding of circular economy concepts. To boost the competencies in this field and help SMEs generate new circular economy solutions, the business advisor and cluster manager devised a staged support with different speeds to accommodate different levels of understanding across cluster members.

Starting from a survey, the business advisor grasped the knowledge needs of cluster members and organised a workshop providing a baseline level of understanding of circular economy concepts. Subsequently, circular economy opportunities were identified among certain cluster

members and the expert provided one-to-one support to 5 clusters to further develop the identified project ideas.

Gaining an understanding of the cluster members' competencies, existing business models and circular economy ideas, the expert managed to guide them in finding collaborative partnership solutions. The key success from the support was the identification of how outputs and by-products from certain cluster members can be used by the others so that circular economy solutions can be applied within the cluster itself.

Developing environmentally-friendly innovations

The societal need to increase sustainability in production presents enterprises with both challenges and market opportunities. The latter aspect, i.e. the development of green products and solutions that allow companies to seize on new avenues for growth and business expansion, was also addressed by the projects in the facility, especially from the perspective of innovation. The projects approached sector-specific challenges to sustainable innovation - e.g. new industrial materials -- the development of business models and marketing strategies for green innovations, the creation of support services to facilitate innovation, or the search for technical solutions for specific green innovation ambitions, among other issues.

Box 2.7: DITECFER - Anticipating the green transition in the rail supply industry

The rail market is mostly driven by large procurements by public entities, rail operators and large companies, all of whom increasingly focus on the environmental performance of their assets. This can prove challenging for rail industry suppliers, as the lifecycle performance is assessed at the level of a complete system (a train, an infrastructure) but depends on a variety of components developed by many different manufacturers, suppliers and service providers.

These suppliers are vertically organised (they tend to "cascade" their requirements to their own suppliers) and include small- and medium-sized enterprises who are less equipped to anticipate tomorrow's requirements. What adaptations does the green transition imply for them?

The support provided as part of the TGTF enabled them to identify key interdependencies in the rail value chain, both in terms of environmental performance and technical/commercial relations. Existing experiences and capabilities within/outside the cluster were mapped out so as to propose use cases and areas for collaboration. A Handbook proposed actions for the short, medium and long term. DITECFER organised a workshop with its members to collect and share existing good practices, stimulate new initiatives and start identifying shared priorities. This enabled them to outline clear steps for a collective approach of sustainability-driven innovation in the cluster.

Energy efficiency, lowering carbon footprint and emissions

Among the topics related to green business models, energy sustainability and the carbon footprint of business are worth mentioning separately. These issues - which figure in the top of environmental concerns of policymakers and regulators - were frequently indicated by clusters as part of their pressing concerns and were addressed by some of the projects of the facility. Although carbon emissions was a topic harder to approach directly – despite being addressed indirectly in several other activities – solutions for energy efficiency and sustainable energy consumption in different sectors was an important area of search and learning for the projects of the facility.

Box 2.8: Optimizing the support to Portuguese SMEs with guidance on Green Transition

The Cluster AEC (Architecture, Engineering and Construction) wants to support its members' green transitions, particularly SMEs. Most of these enterprises face serious financial difficulties and have no means to invest in RD&I or in skilled human resources to develop or implement Green Transition solutions.

Nonetheless, to achieve the Green Transition established goals, the Portuguese enterprises need to meet the requirements of two Strategic Documents, namely: the National Plan Energy and Climate 2021-2030 and the European Green Deal. A solution envisaged by the cluster consisted of designing and elaborating a plan setting new services and practices to be integrated into the Cluster's portfolio offered to its members, therefore supporting SMEs facing key challenges in the Green Transition.

To achieve this goal within the project timeframe, the project had to focus on the most urgent objectives and outputs relevant for the SMEs. Thus, with the technical advisory support provided by the TGTF expert, they were able to focus on the priority topic of sustainability and resource efficiency: 1) Focusing the Project on energy efficiency and circular economy (mainly buildings); 2) Using a baseline questionnaire and the development of a Workshop and of representative case studies working with the companies (design stage and construction stage), and 3) Developing an energy efficiency/ self-generation/ renewables/ circular economy checklist for SMEs to use in the future – a much-needed tool for the sector's SMEs

2.4 Types of advisory services offered to clusters

As shown in Figure 5, the projects designed by the facility to address the challenges indicated by the clusters were based on a catalogue of core services that aimed at supporting both the cluster management and their members. In practice, this catalogue was customized to the specificities and needs of each cluster through discussions between the cluster management, business advisor and project coordinators. Frequently, the resulting project was a mix of two or more service types, although the basic group of services formed the basis for all projects. In closing this chapter, we explain further these core types and some of the associated outputs.

Direct consultancy and advisory services to cluster managers

A common configuration of projects was focusing on qualifying cluster managers to offer services to their members on priority green transition topics and needs. These activities took a variety of forms, such as capacity building sessions with the business advisors on key topics and train the trainer "tracks", in which cluster managers were prepared by business advisors to train their members and followed in the first sessions with SMEs. Another form of cooperation was the preparation of strategies and action plans offering the cluster guidance for the post-project period.

Box 2.9: Consolidating the Plastiwin cluster and developing a new strategy using the Emerald Model

Clusters are different to each other in many dimensions. They have different sectoral focus, geographical coverage, size, internal capabilities, and forms of interacting with their members, among other differences. Some clusters face the challenge of establishing a concrete strategy to consolidate their role in the local entrepreneurial ecosystem and assist their members in the transition to more sustainable technologies.

Plastiwin's management had a solid view of the most promising areas to promote sustainability among Wallonia's plastic industries but needed assistance to translate them into concrete actions impacting local enterprises. This need was readily identified during the initial discussions between the cluster management and the TGTF business advisor. As a result, the starting point of the project was an assessment of the cluster using the Emerald Model. This framework assesses the attractiveness of clusters for investors and is considered easier to operationalize than other leading existing approaches. It has been applied in the cluster literature for several sectors in the last ten years.

This exercise resulted in an Action Plan for Plastiwin that focused on its communication strategy, interaction with local policymakers and new sectoral strategy. The assistance was also important for Plastiwin to establish a partnership with other local clusters in a joint project that has the potential to consolidate the cluster's financial stability and role in the local ecosystem. Moreover, it provided the cluster with a new long-term strategy to support SMEs in the adoption of green technologies.

Direct consultancy and advisory services to SMEs

Several facilities were configurated to offer tailored consultancy services to specific SMEs or groups of SMEs. These cases were selected due to their representativeness within the cluster and the possibility to create generally applicable knowledge on green transition topics. Consequently, focused activities were almost always followed by dissemination events with a broader audience. Examples of such activities included the development of business models, one-on-one coaching sessions, individual workshops, and detailed case studies of specific cluster members that resulted in in-depth assessments and action plans for SMEs.

Box 2.10: Deep dives to develop SME strategy for the green transition using a detailed case study methodology in the Luce in Veneto cluster

Clusters and SMEs can easily recognize the need to use sustainable technologies and develop environment-friendly products and processes. However, obtaining concrete examples and thinking up approaches to identify and plan concrete actions is frequently a barrier that they struggle to overcome. One approach to address this difficulty is to develop a step-by-step concrete case study with a few firms and use them to disseminate useful approaches.

This was exactly the method chosen by the business advisor and managers of the Luce in Veneto cluster. After selecting two highly engaged and sector-representative SMEs of the cluster, the business advisor made a deep dive into the strategy of the SMEs for green transitions. After applying a tailored questionnaire, a business model canvas, a circularity toolkit reflection methodology and several work meetings, a detailed case study emerged for each SME. The main outcome was a concrete and realistic business plan that included an Action Plan with measures in areas such as governance, product development, value chain mapping and input portfolio.

The final action was to prepare a dissemination presentation, which was delivered by the own SMEs in one of the cluster's main seasonal meetings. This ensured that this action was useful to the SMEs that were the object of the case study but also accessible to a broader audience of similar enterprises in the cluster.

Exchange and learning workshops

Another form of co-learning and knowledge dissemination promoted by TGTF was the organization of exchange and learning workshops among cluster members and key experts. These events included the presentations and discussions of case studies and best practices previously produced - which were frequently configurated as mutual learning opportunities combining the know-how of cluster members and business advisors - events directly focused on deepening knowledge on specific topics and workshops for the joint identification of common needs and actions for cluster members in green and sustainability-related areas.

Box 2.11: Mapping the needs of mareFGV and DLTM SMEs in the transition to the green economy

The initial challenge of a cooperation focused on SME support services is to understand and map out the actual needs of SMEs. Clusters members are composed of many enterprises, sometimes from different subsectors and value chain segments, usually facing a multitude of issues. The problem for the cooperation is to identify important issues that can be of broad interest and utility for as many SMEs as possible.

Departing from surveys and traditional questionnaires, the business advisor and managers of the mareFGV and DLTM maritime technology clusters found a simple and creative way to deal with this problem. They jointly identified an initial set of three value chain segments applicable to all subsectors covered by the cluster. This was then combined with three potentially important topics for the cluster members on the green transitions theme. The SMEs were then asked to fill in the matrix in a simple excel format, identifying their main challenges in each area.

This simple exercise collected several responses from SMEs in each of the topics. The business advisors then compiled and discussed these answers in a report that had the final objective of identifying the main common trends. This report provided the clusters with a guide to orient future sustainability-related actions towards their members' needs. This exercise was also key to tailoring three online exchange workshops with different experts on the central issues faced by the clusters' SMEs.

Webinars with experts on key topics

Less interactive events, in which experts offered capacity building sessions to cluster members in specific topics of overall interest, were also a common and useful approach to building green transitions capabilities among cluster members. These events were mostly oriented around sustainability-related topics, such as circular economy and energy efficiency, but also on the development of useful and necessary skills for SMEs, such as developing business models and applying for funding opportunities.

Box 2.12: CONFAPI's commitment to the Green Transition of its members

Confapi joined TGTF with the ambition of driving the largest part of members to a green transition. The cluster team understood that the achievement of this goal was dependent on the capacity of their SMEs of overcoming the obstacles that hamper their transition to greener production processes. The development of actions to help SMEs in this process implied the identification of common needs, something which is challenging due to the singularity of each case.

To overcome this barrier, a questionnaire was distributed to all the companies of the cluster to assess their needs and requirements in relation to green transition and to tailor specific seminars addressed to lead their implementation of the green transition. Fifty companies replied to the questionnaire, and three topics were identified as being relevant to the cluster members: "Company Governance for the development of green transition strategy", "Prevention tools, environmental labelling and management", and "Emissions, Carbon footprint, Water footprint and Ecological footprint".

Three face-to-face thematic seminars took place at CONFAPI head office, in Cagliari, on 28th and 29th October 2021. The events were attended by companies and territorial agencies, and at the end, F2F meetings and general discussions were carried out with some of the participants.

Producing guidance documents and toolkits

Other important outputs were the development of documents, such as best practice guidelines, toolkits, and checklists for cluster managers and their members. These outputs also involved an assessment of the needs of cluster managers and members; and were frequently based on member cases studies and/or business advisors' experience. The topics approached were varied and aimed at creating lasting pathways for firms' green transitions, including documents with sustainability indicators, the listing of useful tools and steps for developing business models or approaching circular economy-related business opportunities, and checklists for adopting specific solutions.

Box 2.13: Mapping the needs of the Green Synergy Cluster in the transition to the green economy

The initial challenges of the cluster management were identified as the following: complementing the technical and engineering skills and expertise in energy and resource efficiency with upgraded knowledge and skills in economics and strategic management of cluster activities, development of the local ecosystem, and support to members to develop innovative business models.

Departing from classical webinars and training sessions, it was decided to design interactive learning and experiential sessions that include training, discussion, questions and answers, brainstorming, thinking outside of the box and creative solutions. Four interactive workshops were tailored for a specific target group. The first interactive workshop involved an innovative framework for stakeholder engagement and improving visibility by implementing the Scenario Planning game for Ecosystem Design. The second workshop was designed as 'train-the-trainers on communication strategies for stakeholder engagement and was delivered to the cluster management team. The third workshop was designed for cluster members and the cluster management team with a focus on Business Model Generation. Following the implementation of a questionnaire with the cluster management team, a fourth workshop was designed for the Co-creation of a Cluster Business Model, Strategic Action Plan, and the cluster Green Roadmap.

The main achievements were documents offering i) a Comprehensive Business Model with instructions on how to apply this tool for SME support, outlining the current and future strategic directions for cluster development; ii) A comprehensive stakeholder view of the challenges and opportunities; iii) Infographics for the Business Model and the Implementation Action Plan; v) infographics for the cluster Green Roadmap.

03

Snapshots of the 25 TGTF projects

Project reports from each of the 25 projects

EUROPEAN CLUSTER COLLABORATION PLATFORM

Strengthening the European economy through collaboration

Cluster organisations: AEI Tèxtils together with ATEVAL, CS-POINTEX, CITEVE and TECHTERA

Cluster sectoral coverage: Textile manufacturing

Cluster geographical coverage: Catalonia (Spain), Valencia (Spain), Piedmont (Italy), North (Portugal) and Auvergne-Rhône-Alpes (France)

Number of members: 758 (670 SMEs)

Type of support offered: Public funding, facilitation of external collaboration (beyond cluster), internationalisation support, among others

Business Advisor for the facility: Liv Montuori

ECCP Profile AEI Tèxtils,

Main challenges

Textile is one of the resource-intensive industries prioritized in the EU Green Deal. This is particularly challenging for clusters in supporting SMEs to:

- Considering the sustainability in their 3 dimensions (economic, environmental and social) as an integral factor on the decision-making processes;
- Introducing the resources efficiency optimization in the design stage (eco design/ design for circularity);
- Selecting sustainability and circular materials

Project objectives

The key ambition related to resource efficiency and sustainability was to prepare the cluster managers to promote, advise and guide the cluster members, especially SMEs, in green transition practices and approaches, more specifically: increasing the awareness to green issues among top management and staff; incorporating sustainability in the centre of the decision-making processes; optimizing the resources efficiency; incorporating circular and sustainable materials in textile products.

Activities undertaken

- ✓ The development of a life cycle assessment-based tool which defines a methodology to carry out the sustainability balance of each step of the life cycle of the textile value chain;
- ✓ Two online webinars focused on circular economy business models and on the main problems that SMEs face in the adoption of greener practices in their production processes.

Results and outputs created

- ✓ A life cycle assessment-based tool for clusters and their members with a decision flow based in the 3 sustainability dimensions (environmental, social and economic) in order to obtain more sustainable and circular textile products with greener processes;
- ✓ Together with the clusters' members the main problems associated with the textile industry were identified: packaging; textile solid waste; waste of water;
- ✓ Through the interaction among different stakeholders, it was possible to identify solutions to make the sector more circular;
- ✓ The development of a common methodology for webinars.

***"It was an interesting and tough challenge to develop a self-assessment tool of circular business models fully customised to the needs and priorities of our companies"* Cluster manager**

Cluster organisations: Aquimer, together with EEK.SH, BaMS, BioBall e.V. Biookonomie, Acuiplus, Vlaams Aquacultuurplatform, and EATiP

Cluster sectoral coverage: Livestock processing, focus on aquaculture

Cluster geographical coverage: France, Germany, Spain, Belgium

Number of members: Aquimer as leading partner: 151 members (80 SMEs)

Type of support offered: Advisory support for the clusters and SMEs

Business Advisor for the facility: Lorena Jurado

Main challenges

Marine and aquatic biomasses have a huge underexploited potential to contribute to the provision of food, feed and other carbon-based resources for European industry sectors. Currently only a limited amount of technical solutions and business modes allow for more sophisticated setups, e.g. in the use of renewable energies, side stream valorisation or cradle-to-cradle approaches to raw material use and integration with other industry sectors.

Project objectives

Starting from the main challenges faced by the cluster and its members, the project was designed to focus on the challenges related to circular economy. The core of the support revolved around providing cluster managers with a wide array of best practices and success stories. Industrial symbiosis, use of renewable energies, and technological solutions to support the greening of the aquaculture sector were discussed with experts in each domain to increase the capacity of cluster managers.

Activities undertaken

- ✓ Project kick-off and needs assessment of the different clusters involved.
- ✓ Webinar on the digitalisation of aquaculture.
- ✓ Webinar on the green shift and innovation best practices from Norway.
- ✓ Webinar on circular approaches to aquaculture, presenting the successful case of industrial symbiosis between a lobster farm and a data centre.
- ✓ Webinar with the author of "The new fish wave" to discuss the circular economy experience of the Iceland's Ocean Cluster.
- ✓ Webinar on accelerating sustainable aquaculture globally: the case of Katapult Ocean.

Results and outputs created

- ✓ Cluster managers trained and mobilized on circular economy concepts, strategies and opportunities.
- ✓ Cluster managers trained and mobilized on digitalisation concepts, strategies and opportunities.
- ✓ Cluster managers trained and mobilized on industrial symbiosis best practices.
- ✓ Cluster managers trained and mobilized on sustainability concepts, strategies and opportunities.

"Given that various clusters' different interests, TGTF support included experts on circular economy, industrial symbiosis, and sustainability. Success stories from other aquaculture clusters and the involvement of venture capitalists enabled a comprehensive support." – the business advisor.

Cluster organisation: IDiA

Cluster sectoral coverage: Information technology and analytical instruments

Cluster geographical coverage: Aragon region, Spain

Number of members: 78 members (42 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Ulrika Hurt

ECCP Profile

Main challenges

Many of the cluster members, i.e. companies which include 42 SMEs, are willing to act and accelerate the green transition. However, they not only lack understanding of the general concepts, but also need support in translating these into possible actions. Moreover, expert support and experiences coming from the market are scarce. Having references from good practices on sustainable business models and the more efficient use of resources would be helpful for the companies when it comes to creating their greening projects and revising their business models.

Project objectives

The objective of this project was to help IDiA members to successfully develop and implement new actions aligned with the priorities of European Commission of the green, digital, and resilient transition. It is vital to support companies in creating and implementing competitive projects that balance investment and benefit. The aim is to increase their competitiveness, bring new solutions to the market and improve the performance of their manufacturing processes. In addition, the cluster wants to encourage its members to design new circular economy flows.

Activities undertaken

- ✓ An online survey with cluster members to learn about their main sustainability concerns and collect ideas for potential future projects.
- ✓ Establishment of a Working Group within the Cluster dedicated to green transition.
- ✓ Mapping of opportunities based on SME needs and circular economy trends within the EU.
- ✓ Drafting of a communication plan to enhance the cluster's role in promoting the green transition.
- ✓ Collection of relevant documents and materials for cluster members to share in a repository.
- ✓ Support to companies with their applications to funding through EU 'green' projects.

Results and outputs created

- ✓ Working Group "Green and Sustainable Innovation" established at the cluster. Five meetings delivered during the TGTF timeframe.
- ✓ A cluster needs assessment, with a mapping of topics of interests and project ideas from survey.
- ✓ Online repository for companies and entities to share information of interest for IDiA's audience.
- ✓ Communication strategy to empower the cluster and its members to act on the green transition.
- ✓ Presentation of funding opportunities for green projects and relevant EU policies.
- ✓ Participation in online event organised by the Spanish Ministry of Foreign Affairs to present the TGTF and the actions undertaken by IDiA.

"The direct contact between the business advisor and the cluster has been very positive. This kind of initiatives should continue in the future." - Cluster manager

Cluster organisation: Associació Catalana Clúster De La Indústria De L'esport (INDESCAT)

Cluster sectoral coverage: Sport

Cluster geographical coverage: Catalunya

Number of members: 87 members (57 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Rafael Dominguez

Main challenges

In order to address the challenges linked to green transition and to make sport more sustainable and help protect the environment, INDESCAT lacked understanding of the individual needs and barriers their members face in their green transition. In addition, the cluster and many of its SMEs lack knowledge on concrete solutions to tackle green transition challenges. INDESCAT is experienced in offering tailor-made services, but has not yet been able to develop particular services and mentorship programmes that provide solutions to individual companies regarding their green transition.

Project objectives

The project ambition was to offer a tailor-made service to individual companies, providing them knowledge from international best practices and innovative technologies in their green transition. INDESCAT ambition has been to increase the awareness of SMEs on sustainability, by including social and environmental impacts in their business strategy as a so-called shared value. Since its foundation, INDESCAT has focused on protecting the environment, contribute to green economies and support the Sustainable Development Goals.

Activities undertaken

- ✓ Support the organisation of a working group session on outdoor sports events
- ✓ Understanding the needs of outdoor events in terms of sustainability
- ✓ Collect and analyse information on best practices and environmental regulation for outdoor sports events
- ✓ Draft a sustainability checklist on outdoor sport and validate it with INDESCAT working group
- ✓ Suggest project ideas related to the sustainability checklist and an initial action plan for implementation of at least one of the projects
- ✓ Sustainability checklist presentation to cluster members
- ✓ Feedback analysis with checklist and project ideas final validation

Results and outputs created

- ✓ Working group session on outdoor sports events
- ✓ First draft of the sustainability checklist on outdoor sport event
- ✓ Validation session with selected cluster members
- ✓ Report including: sustainability checklist on outdoor sport events, list of suggestions on project ideas
- ✓ Webinar with cluster members on sustainablity checklist
- ✓ Feedback report based on member inputs
- ✓ Final sustainability checklist

"TGTF helped raising awareness to the importance of minimising the negative impact of outdoor events on nature and urban areas" – Cluster Management

Cluster organisation: Balears.t

Cluster sectoral coverage: Tourism

Cluster geographical coverage: Balearic Islands, Spain

Number of members: 29 members (12 SMEs)

Type of support offered: Advisory support for the cluster and its SMEs

Business Advisor for the facility: Elvira Martín Tarín

ECCP Profile

Main challenges

The main challenge for the green transition of the members of Balears.t is a cultural one. The economic model and mindset that brought prosperity to the Balearic Islands is not sustainable. A profound transformation is required in most actors throughout the value chain. Sustainability must be understood as an investment, not as a burden. Giving visibility to the sustainability returns in the economic results, social and environment aspects is therefore critical.

Project objectives

The project aims to contribute to the transformation of the touristic model in the Balearic Islands by helping the cluster members develop business models based on a long-term commitment to sustainability. It will also work towards a revision of business processes and a cultural change in the management of SMEs and companies across the value chain. To pursue these objectives, tailored coaching sessions and guidance documents will be provided for the cluster members.

Activities undertaken

- ✓ A diagnosis of the current situation of the tourism sector in the Balearic Islands, with a profiling of the market and actors involved.
- ✓ Identification of opportunities for cluster SMEs at national and European level related to green transition and post-Covid recovery.
- ✓ Online survey with cluster members to identify their sustainability challenges and needs.
- ✓ Dedicated coaching sessions with cluster members addressing their specific sustainability challenges and future ambitions in this area.
- ✓ Development of hospitality benchmark on sustainability for the tourism sector.
- ✓ Drafting of recommendations for Balears.t to gain visibility and positioning as green transition facilitator considering the cluster strategy.

Results and outputs created

- ✓ Informative webinar with cluster members to raise awareness of the services offered at the TGTF.
- ✓ Presentation outlining the status, sustainability challenges and opportunities for Balearic tourism.
- ✓ Recommendations for the cluster on how to gain more visibility and positioning as a green transition facilitator for their members.
- ✓ Several cluster members advised on how to improve the sustainability of their operations and seize 'green' business opportunities in near future.
- ✓ Tailored recommendations for the cluster members following up from coaching sessions.
- ✓ Benchmark on sustainability for hospitality sector.
- ✓ Guidance document with sustainability key performance indicators for Balears.t members.

"Many thanks to the business advisor Elvira Martín Tarín for her professional work and inputs given to our cluster members" - Cluster manager

Cluster organisation: Cleantech Cluster Lithuania

Cluster sectoral coverage: Environmental services
Cluster geographical coverage: Lithuania
Number of members: 38 members (27 SMEs)
Type of support offered: Advisory support for the cluster staff and SMEs
Business Advisor for the facility: Christian Angerbauer
ECCP Profile

Main challenges

As businesses face an increasing need to become more sustainable in their operations, the cluster suffered from a lack of knowledge to support their members, especially SMEs, in specific 'green' areas. High-quality experience and expertise are not available in national cluster networks, and not easily accessible at international level. Cleantech Cluster Lithuania lacked energy efficiency experts among their staff members, as well as accessible initiatives to offer their SMEs and large-scale projects to motivate their members to embark on the green transition.

Project objectives

By getting involved in the TGTF, Cleantech Cluster Lithuania aimed to acquire knowledge and develop skills to help the cluster staff and members in their sustainability journey and to learn about hands-on experiences and practical solutions that can be tailor made to specific needs of the SMEs. Moreover, such enhanced knowledge, practice and visibility may attract more SMEs to join the cluster and thus strengthen the position of sustainability as part of the mission of the cluster itself.

Activities undertaken

- ✓ Identification of capacity-building needs of the cluster staff members.
- ✓ Selection of relevant topics to cover in capacity-building sessions for cluster staff and members.
- ✓ Mapping of green opportunities and relevant good practice examples based on the needs of the cluster members.
- ✓ Design of capacity-building workshops for cluster staff and cluster companies, with dedicated sessions for SMEs, addressing circular economy and sustainable business concepts, European framework and opportunities applied to the clusters' value chain.

Results and outputs created

- ✓ Three capacity-building workshops delivered for the cluster staff, focusing on how the cluster can support their members with sustainability issues.
- ✓ One workshop delivered for cluster members on general green transition topics of interest.
- ✓ Two capacity-building workshops tailored to the specific needs and challenges of cluster SMEs.
- ✓ Cluster manager and staff trained and mobilised on green transition concepts, strategies and opportunities.
- ✓ List of actions for cluster managers to support cluster members with sustainability issues.
- ✓ Increased awareness of green solutions and opportunities by cluster members.
- ✓ Evidence of concrete actions already adopted by an SMEs to improve its sustainability.

"The training sessions have been very helpful for us thanks to their practical approach. We find it easier now to talk to the companies in our cluster about the green transition and support them." -

Cluster organisation: Cluster AEC, Arquitetura, Engenharia e Construção

Cluster sectoral coverage: Construction products and services
Cluster geographical coverage:
Number of members: 69 members (26 SMEs)
Type of support offered: Advisory support for the cluster and SMEs
Business Advisors for the facility: Geraldine Boylan and Alexandre Fintoni
ECCP Profile

Main challenges

Regarding the challenges related to sustainability and resource efficiency, namely concerning energy efficiency and sustainable use of materials, the cluster AEC has to comply with the National Plan Energy and Climate 2021-2030 and with the European Green Deal. In this sense, the Cluster need to support Construction Sector companies in order to be able to develop and implement new methods and processes and to optimise solutions, in terms of Green Transition strategies.

Activities undertaken

- ✓ Develop baseline questionnaire for the companies involved in the Context Review
- ✓ Current European baseline for planning requirements for energy efficiency in buildings
- ✓ Develop a Context Review online workshop
- ✓ Mapping of Context review workshop results vs high-level policy/ available guidance.
- ✓ Development of an energy efficiency/ self- generation/ renewables/ circular economy checklist for design/architecture stage.
- ✓ Development of an energy efficiency/ self- generation/ renewables/ circular economy checklist for construction phase.
- ✓ Issue checklist to Cluster companies; request feedback on relevant areas.
- ✓ Develop analysis of questionnaire results
- ✓ Develop case studies based on three companies selected by AEC Cluster to identify opportunities assessment for the application of the checklist vs their own company.
- ✓ Develop and implement a 2.5-hour webinar to present and discuss findings. Include an opportunity for cluster companies to present their own learnings.

Project objectives

The Cluster AEC needs to meet the requirements of two Strategic Documents, in order to achieve the Green Transition established goals: National Plan Energy and Climate 2021-2030 and European Green Deal. To that end Cluster AEC wants to support their members in understanding and implementing this transition, particularly SMEs, which have deep financial difficulties and have no means to invest in RD&I or in skilled human resources, to develop or implement Green Transition solutions or methods.

Results and outputs created

- ✓ Baseline questionnaire template
- ✓ Analysis of feedback
- ✓ Context review output
- ✓ High-level strategy for the Cluster based on key topics, typical actions (in the context of Portugal) and minimum of 1 example per topic in a 'call out box'
- ✓ Checklist /guide development
- ✓ Case studies development
- ✓ Webinar

"TGTF was essential for assessment of the Green Transition Process in the Portuguese AEC Sector" – Cluster Manager

Cluster organisation: Clúster Alimentario de Galicia (Clusaga)

Cluster sectoral coverage: Food processing and manufacturing

Cluster geographical coverage: Galicia region, Spain

Number of members: 135 members (99 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Paulina Janiak

ECCP Profile

Main challenges

The main challenge for the cluster was a lack of knowledge to support their members with the green transition. This was due to insufficient guidance materials being available for the food sector, limited in-house expertise on solutions and tools, limited access to fora or networks to learn from the experiences of other clusters, and insufficient financial and technical support to define and launch green projects and support services for their members.

Project objectives

Clusaga aims to become a facilitator for the green transition of Galician food companies. Thus, they seek to strengthen their capacities and service offer related to green transition and circular economy as well as raise awareness and improve their support to members to adopt sustainable solutions. The ultimate goal is to reduce the negative impacts of food production, foster greener performance and organisational strategies, complying with and anticipating public policies, and entering new markets with greener products.

Activities undertaken

- ✓ Survey for cluster members to gather data about companies willing to participate in TGTF project pilot and their progress with the green transition.
- ✓ Compilation and analysis of survey results. Selection of five pilot companies based on award criteria agreed with the cluster.
- ✓ Tailor-made online survey for the five pilot companies to learn about their efforts to become more sustainable and introduce circular measures in their operations and value chains.
- ✓ Evaluation of surveys and development of tailored recommendations to advance towards the green transition and circular economy.
- ✓ Identification of relevant green opportunities for the Clusaga members
- ✓ Design of new advisory service for the cluster
- ✓ Delivery of a training session for cluster members

Results and outputs created

- ✓ Selection of five companies to participate in the TGTF project pilot.
- ✓ Recommendation report for each of the five pilot companies based on their feedback in surveys about their green transition journey.
- ✓ One-on-one meetings with the five pilot companies building on recommendation reports.
- ✓ A green transition workshop delivered for cluster team members and several SMEs, with training on sustainability and circularity concepts for the food sector.
- ✓ New advisory service designed, and an action plan developed for the cluster to continue the green transition journey beyond the TGTF.
- ✓ Introduction of an action axis on sustainability and circular economy in Clusaga's Strategic Plan 2021-2025

"This type of initiative adds value and should be replicated. Tailored advice to companies makes a real impact and strengthens the clusters. We really liked the interactive, hands-on approach of the TGTF" - Cluster manager

Cluster organisation: Cluster Energy Technology Berlin-Brandenburg

Cluster sectoral coverage: Electric power generation and transmission

Cluster geographical coverage: Berlin-Brandenburg region

Number of members: 298 members (250 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Sebastian Haas

ECCP Profile

Main challenges

The cluster needs support to acquire the knowledge required to help its cluster members, mainly SMEs, to make more sustainable investments and develop more resilient business models. These companies need to be able to benefit from market opportunities created by upcoming sustainability legislation or market trends and to proact/react to them by adapting their business models. Companies should get a precise idea of how to use tools that support them in making sustainable investments. Cluster ETBB wants to make results measurable wherever possible and build best practices in their region.

Project objectives

Support Cluster ETBB in building its solutions-finding capacity to support SMEs on Green Transition, thus relieving pressure and burden on their part. Considered a structurally disadvantaged region under the ERDF, SMEs from the German capital region also need the support in order to stay competitive in both a national and an international context. Sustainable innovation is key to achieving this. Cluster ETBB daily business is promoting innovation and facilitating joint innovation projects among cluster players. TGTF support service helped guide Cluster ETBB on how to leverage sustainability-focused innovation and what sustainable, innovative business models for the energy technology sector could look like.

Activities undertaken

- ✓ Develop knowledge co-creation process along the given requirements of relevant funding schemes, rising sustainability concepts.
- ✓ Idea generation for cluster organisation's sustainability support services portfolio.
- ✓ Needs assessment workshop
- ✓ Collection of the "Needed services longlist"
- ✓ Guiding the services selection and leading the agile development process
- ✓ Service concept development for selected services including validation feasibility aspects
- ✓ Outlining sustainability support services design
- ✓ Writing of sustainability support services strategy
- ✓ Services legitimation and joint first steps of implementation within cluster's ecosystem.
- ✓ Disseminating and leveraging the sustainability support services to other clusters.

Results and outputs created

- ✓ Sustainability knowledge inventory (meta structure).
- ✓ Needs assessment workshop.
- ✓ Needed services longlist as needs assessment tool.
- ✓ Structuring of a broad survey.
- ✓ Documented workstream with 5 to 10 SMEs.
- ✓ Service concept including feasibility aspects.
- ✓ Outline Services Design including stakeholder engagement necessities.
- ✓ Validation workshops.
- ✓ Written Services strategy to complement existing plans.
- ✓ Cross-fertilization streams to other 5 BB's capital region clusters.

"Leveraging cooperation between SMEs is crucial to the implementation of Green Transition" – Cluster Management

Cluster organisation: Lombardy Green Chemistry Association

Cluster sectoral coverage: Green chemistry, bioeconomy, biorefinery, circular bioeconomy

Cluster geographical coverage: Lombardy region, Italy

Number of members: 52 members (28 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Manfred Kircher

ECCP Profile

Main challenges

The number of companies that invest in less harmful substances and GHG emissions and that use green technologies is growing. In 2030, bio-products will represent 30% of industrial production. However, even though the green transition is a recognised priority, more effort is required to encourage business models that are based on renewable raw materials and increase investments in green technologies, products, and activities.

Project objectives

The project focused on creating resilient business models, tapping into green investment opportunities and adopting circular economy solutions for materials.

For the cluster members, notably SMEs, the project aimed at:

- presenting funding opportunities for sustainable business model development;
- coaching to identify solutions to increase the circularity of bio-based processes;
- and creating connections to unblock the funding necessary to adopt sustainable business models.

Activities undertaken

- ✓ The organisation of two training sessions in the form of webinars to share information on strategies to develop a business plan for a circular bio-based business.
- ✓ Three sessions of one-to-one coaching with ten different SMEs to strengthen the competitiveness of their business model and identify solutions to increase the circularity of bio-based processes.
- ✓ The organisation of the Bioeconomy Regional Investment Forum, where selected SMEs that received coaching had the chance to pitch their companies and sustainable business models to investors and the public.

Results and outputs created

- ✓ The sharing of information and knowledge, and discussions on best practices to secure funding for circular bio-based businesses.
- ✓ New company profiles for the selected SMEs, with services and solutions to support their green transition.
- ✓ The SMEs who were presented at the forum had the chance to present their case to investors and the public. Three SMEs were selected as winners, and will receive further coaching from the company accelerator of the Consorzio Italbiotec.

"The cluster has selected several SMEs as applicants for the EIC accelerator funding program and received advice in the framework of TGTF. The consulting helped to sharpen the profile of the applications for the call and, at the same time, the business plans were critically reviewed. In this way,

Cluster organisation: SOFIA Knowledge City

Cluster sectoral coverage: ICT, Electronics, R&D, Education & VET

Cluster geographical coverage: Sofia City, Bulgaria

Number of members: +50 members (+35 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Fabio Maria Montagnino

ECCP Profile

Main challenges

The cluster's ambition is to become a support centre in Sofia for the process of green transition through the services provided by its members. These includes the promotion of projects (EU, PPP) in areas such as energy efficiency, well-being, green cities, circular economy and smart mobility. The core need of the cluster is to increase capacity building within the areas of "greening of ICT" and "greening with ICT", i.e. greening of ICT products and services as well as greening through ICT solutions, to capitalise on the possibility for green growth within the cluster and at city level.

Project objectives

Starting from the cluster's goal of becoming a centre for green growth in the area of climate-neutral and sustainable smart cities, the project was designed to help create an action plan for greening Sofia based on the cluster's existing strategies and the city's digital transformation strategy. The objective of the cooperation was to raise awareness on green ICT, disseminate best practices and increase capacity-building for local stakeholders. The cooperation also aimed at providing member SMEs with advice on their own business model transformation and initiating PPPs for the implementation of green ICT

Activities undertaken

- ✓ An online survey with cluster members to assess their familiarity and preparedness with sustainability and circular economy topics/principles as well as possible interest areas.
- ✓ A workshop focused on needs and opportunities for businesses in the digital and green transition processes of the city.
- ✓ A training session with cluster managers and a selected number of potential future trainers focused on green and circular thinking in business making.
- ✓ Implementation of one-on-one coaching sessions with selected member SMEs (2 sessions for 3 SMEs) centred on the ideation, prototype and testing of circular, sustainable and green business canvas.

Results and outputs created

- ✓ Assessed cluster SMEs' current state of play on circularity and sustainability issues and identified possible future action areas for the cluster.
- ✓ An overview of practices for the green economy transition in cities including emerging needs, existing business models and policy tools for urban sustainable development.
- ✓ Trained cluster managers and members on tools and practices useful for ecosystem mapping, identification of innovation strategies and business models definitions.
- ✓ Targeted consultancy to selected SMEs on strengthening the sustainability of their business models and the identification of opportunities.
- ✓ Identified common challenges and possible collaboration opportunities for and across members.

"We appreciate very much the importance of the received technical assistance under TGTF for better focusing our cluster initiatives on smart city transition. The chance of the cluster members and stakeholders, mostly IT professionals and municipality servants, to work with and to be trained by an experienced coach and mentor like Fabio will increase the impact of their digital solutions on urban development." - Cluster manager

Cluster organisation: CONFAPI SARDEGNA

Cluster sectoral coverage: Sardinian small and medium-sized industrial enterprises

Cluster geographical coverage: Sardinia (Italy)

Number of members: about 1.000 SMEs

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Massimo Perucca

Cluster website

Main challenges

Confapi's main mission when they joined this facility was to drive the largest part of its members to a green transition, especially those in the building sector and operating in the Sulcis Area. Confapi's main ambition was to contribute to the reduction of carbon emission of its members and to improve the energy efficiency of buildings. To achieve this goal, SMEs needed to receive the right incentives and systematic support.

Activities undertaken

- ✓ Webinars on general topics of the Green Transition, Green Deal, Agenda 2030 and SDGs, Just Transitions and the related actions that can be implemented by SMEs to support the goals.
- ✓ The analysis of the cluster composition in terms of dimension, geographical distribution, industrial sector, and number of employees.
- ✓ A questionnaire distributed among all members of the cluster to identify the topics to be discussed on the three specific seminars issued by sector or requested thematic area.
- ✓ Three webinars of the topics identified through the questionnaire.

Project objectives

- To enhance the SMEs' awareness on the use of high efficiency materials in the building sector and to adopt common guidelines for energy efficiency in buildings;
- To support Public Authorities to develop and implement general and common actions concerning energy efficiency;
- To help SMEs to overcome obstacles as they become greener and identify key actions to become more sustainable.

Results and outputs created

- ✓ The creation of a baseline of fundamental knowledge among all the companies of the cluster and sharing of best practices for reaching sustainability goals;
- ✓ The involvement of SMEs in the webinars where they identified the carbon transition as one of the main challenges of their near future;
- ✓ The assessment of SMEs' needs and requirements in relation to the green transition to tailor specific seminars addressing the implementation of green transition actions

"Thank you very much for involving CONFAPI Sardegna in such an important challenge for the future of the Sardinian economy and the development of SMEs." - Cluster manager

Cluster organisation: DITECFER District for Rail Technologies, High Speed, Networks' Safety & Security

Cluster sectoral coverage: Transportation and logistics

Cluster geographical coverage: Tuscany

Number of members: 127 members (102 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Elie Herberichs

ECCP Profile

Main challenges

DITECFER considers business models to be the key to activating the Green Transition and to addressing its needs. At the same time, investments are strictly linked to business models as a 'green transition' means to "do things differently" which requires investments tailored to each specific SME's needs (e.g. new machinery to work with new green materials or new simulation software for designing using eco-design principles etc.). Given its high strategic value, the support to the development of new Business Models and Investments cannot be developed as a DITECFER service without specific preparation to achieve the desired results.

Project objectives

Given the number of possible challenges to be faced with while implementing a Green Transition - twin transition, recovery, and industrial resilience - the ability to offer highly specialized support is crucial for a cluster like DITECFER. Thus, DITECFER wants to be able to offer its companies this level of specialised support and to be able to address their needs. The Recovery Plans and the new EU Industrial Strategy call for Green Transition investments, however the risk is that – like in previous situations – the defined policies are not in line with the operational reality and that, there are not enough people/organizations in the field prepared to undertake the required activities. This poses the risk of not achieving the expected impact and that is exactly what DITECFER wants to avoid.

Activities undertaken

- ✓ Identification of general drivers
- ✓ Clearly define the value chain
- ✓ Development of a set of use cases for cluster members integrating a list of services that can be implemented by the cluster
- ✓ Identification of successful experiences (with members' inputs)
- ✓ Recommendation of tools for services development
- ✓ Fine-tuning and validation with cluster's members (including a workshop)

Results and outputs created

- ✓ Needs assessment of major value chain segments
- ✓ Set of indicators – 1 report produced
- ✓ Handbook of use cases
- ✓ Guidance documents for the development of support services
- ✓ Workshop

"Thanks to the proactive discussions during the meetings with the expert, DITECFER launched the idea of a "Sustainability Awards" to foster and award the most effective green approaches in the value chain" – Cluster manager

Cluster organisation: Green Synergy Cluster

Cluster sectoral coverage: Environmental services

Cluster geographical coverage: Plovdiv region, Bulgaria

Number of members: 32 members (28 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Emanuela Todeva

ECCP Profile

Main challenges

The administrative body of the cluster consists of engineers, experienced in the technical aspect of energy and resource efficiency, who lack business related knowledge. Therefore, the need to develop more economics-related knowledge in order to support the members with their business models, investment assessment and market research was identified.

Project objectives

The objectives of the action were to:

- organise three developmental workshops, utilizing a 'Train-the-trainer' concept;
- and support the cluster management to achieve Effective Stakeholder Engagement, Communication Strategies and driving through Innovation Ecosystem Design and Implementation, and Business Model Generation with an accompanying Cluster Roadmap and Action Plan.

Activities undertaken

- ✓ Developing a framework for stakeholder engagement and improving visibility – adapting the Scenario Planning game.
- ✓ Interactive workshop with stakeholders, identifying the key challenges and opportunities for the Green Synergy Cluster.
- ✓ Train-the-trainer workshop with Cluster Management developing Effective Communication Strategies.
- ✓ Train-the-trainer workshop with Cluster Management, SMEs and Business Services on how to develop Business Models for SMEs, Clusters or other Business Organisations.
- ✓ Business Model generation session with Cluster Management to develop the Business Model for the Green Synergy Cluster, accompanied by a Strategic Development roadmap and an Action Plan.

Results and outputs created

- ✓ Improved skills and competences on stakeholder engagement and improving visibility and opportunities for cluster growth.
- ✓ Better understanding and knowledge on Effective Communication Strategies with key Stakeholders, Green Ecosystems Design and implementation.
- ✓ Better Understanding, Knowledge and Practice on Business Model generation for Clusters and SMEs.
- ✓ The development of a business model implementation plan with cluster managers through co-design.
- ✓ The development of a Cluster Roadmap and the Strategic Action Plan.

"The implemented interactive learning and experiential sessions during the course provided valuable insights for new creative solutions an advances green transition roadmap for the cluster." – Cluster manager

Cluster organisation: JIC

Cluster sectoral coverage: Business services

Cluster geographical coverage: South Moravia, Czech Republic

Number of members: 315 members (315 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Anna Tiberi

Cluster website

Main challenges

JIC's biggest challenge seems to lie in the business models (BMs) area which possibly also has the biggest impact. For many SMEs, the way of operation has been the same for many years and it is difficult to change. They are not prepared for the anticipated challenges of resource scarcity, market and legislation changes. However, the necessary support to make this transition is not available. There are many ideas and examples on how to transform BMs to be more sustainable, but the process usually involves a complex approach (market analysis, pricing, internal processes, logistics) while also often involving changes in entrepreneurs' mindsets. The impact of such changes is difficult to assess in

Project objectives

JIC wanted to use the ECCP's support to better communicate with the public and new clients. Their objective was to raise awareness and promote the green transition trend through success stories and best practice examples.

JIC was already in the process of designing and piloting services called "sustainability as a business opportunity" aimed at assisting their SME clients with implementing CE principles and developing strategies that consider impact on all three areas – people, profit, and the planet in order to achieve long-term success, zero landfill commitment by 2024, and 50% lower GHG emissions by 2030.

Activities undertaken

- ✓ Develop a proposal on raising awareness around SDGs relevant to JIC under the framework of the European Green Transition.
- ✓ Co-develop a methodological framework to take action towards green transition.
- ✓ Co-design a pilot workshop for knowledge transfer to JIC members on raising awareness and committing to priority actions towards the green transition for SMEs (capacitation for implementation).
- ✓ Fine-tune the process based on the pilot results analysis.
- ✓ Support the development of an implementation and deployment plan.

Results and outputs created

- ✓ Guidance document on raising awareness on the European Green Transition goals related to the JIC targets.
- ✓ Co-creation of a pilot workshop on raising awareness and taking action towards green transition.
- ✓ Pilot workshop on raising awareness and taking action towards green transition (commitment to priority actions) for SMEs (capacitation for implementation).
- ✓ Implementation and deployment plan.

"The Green Transition must be seen as a business opportunity" – Cluster manager

Cluster organisations: mareFGV and DLTM

Cluster sectoral coverage: shipbuilding, boatbuilding, maritime transport, offshore and navigation services, remediation of marine ecosystems

Cluster geographical coverage: Friuli Venezia Giuli and La Spezia

Number of members: 70 members mareFGV (60 SMEs), 104 members DLTM (81 SMEs)

Type of support offered: Workshops, webinars, exchanges and learning

Business Advisors for the facility: Spyros Kouvelis and Christina Deligianni

Main challenges

The challenge is to raise awareness and increase the use of sustainable materials in the lifecycle in order to minimize the impact of the construction and operation phases, particularly in relation to scrap management. In energy, key challenges are connected to the design and the production of devices that could improve energy efficiency, optimization, the transition of ports/marinas into "energy hubs" and the use of alternative sources of energy.

Project objectives

The project was tailored to present and disseminate solutions that are capable of addressing the challenges of the cluster members in their transition to greener technologies. This was done through a direct assessment of the needs of the cluster members followed by a series of webinars with enterprises on the key topics for the sector, which were coordinated by the business advisor and complemented by additional experts in specific areas.

Activities undertaken

- ✓ Development of project content and outline of actions.
- ✓ Drafting of a Mapping Matrix to be used as a basis for the mapping of challenges exercise.
- ✓ Preparing of a participatory mapping with cluster(s) members to fill in on an online survey based on the mapping Matrix.
- ✓ Identification of potential participants and experts for knowledge and best practices exchange webinars and reach out to them.
- ✓ Set-up of online voting on subjects for further training & exchange webinars within the project, such as practical application of technologies, technologies for green transition from design to operation, business cases, pitching to investors, marketing, circular economy and LCA assessment, ESG Finance & Investment.

Results and outputs created

- ✓ Brief report outlining the aggregated groups of challenges/requirements emerging from the Mapping Matrix, along with identification of Marine, Environmental and ESG literacy/training needs.
- ✓ Three separate and consecutive webinars of 1.5-2.0 hours each for the presentation of solutions and best practices, followed by discussions on each of the three aggregated groups of challenges/requirements emerging from the Matrix.
- ✓ Final webinars on the most voted and preferred issues.
- ✓ Final project summary report.

"A cross-sectoral interaction that facilitates the knowledge of exercises/best practices already in place and allows their capitalization (and potential improvement) in other sectors." - Cluster manager

Cluster organisations: Materalia and CMAV (Advanced Materials Clusters)

Cluster sectoral coverage: Materials

Cluster geographical coverage: Grand Est (France) and Catalonia (Spain)

Number of members: 161 (86 SMEs) and 63 (37 SMEs)

Type of support offered: Facilitation of collaboration between members; Support of Research, Development and Innovation, among others

Business Advisor for the facility: Nicolai Sederberg Rottbøll

ECCP Profile Materalia and ECCP Profile CMAV

Main challenges

Two key industrial sectors were selected to work with:

Metallurgy, which is facing the following challenges: i) replacement of natural raw materials by recycled ones, ii) valorisation of industrial waste heat to use alternative energy vectors, minimizing consumption of fuel-based gas resources, and iii) minimisation of waste materials by developing up-recycling technologies/methods to close the life-cycling of by-products generated in the metallurgical process.

Wind energy, which is facing the challenges of: i) recycling turbine blades is still not economically feasible, which is still a key challenge for this market, ii) extending the technical lifetime of wind farms by

Project objectives

The main objective of this project was to boost green transition in Metallurgy and Wind Energy industries. To do so, the following specific goals were defined:

- the identification of the key sustainable value chains for both industries;
- the assessment of new business models that could be used as role model by both industries;
- the main challenges and barriers that need to be addressed in order to apply circularity to these sectors.

Activities undertaken

- ✓ Internal meetings between the cluster team and the advisor to discuss and share the challenges faced and to define the best strategies to reach the objectives of the project.
- ✓ Study of both industries (metallurgy and wind energy) to know their value chain in order to understand the opportunities and gaps regarding circular economy.
- ✓ The identification of best practices on circular business models.
- ✓ Two innovation-based virtual workshops to identify the specific issues/challenges that the metallurgy and wind energy sectors are facing in the implementation of circularity principles in their production processes.

Results and outputs created

- ✓ Best practices report on circular business models.
- ✓ 2 online workshops (one for each industry) using cutting edge methods to mobilise participation.
- ✓ A workshop report covering the main subjects discussed and identifying the issues that should be used as starting points to define strategies and action points.

***"The workshops were dynamic, interactive and participation was encouraged. Positive feedback was received and potential further actions between cluster teams and cluster SMEs have been identified."* - Cluster manager**

Cluster organisation: Lublin Eco-Energy Cluster

Cluster sectoral coverage: Renewable energy and energy efficiency

Cluster geographical coverage: Lubelskie region, Poland

Number of members: 38 members (30 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisors for the facility: Geraldine Boylan and Alexandre Fintoni

ECCP Profile

Main challenges

Cluster members had little experience in using circular economy solutions and they were looking to acquire new competences in this field though the identification and implementation of new circular economy business models in the context of re-use of waste generated from entities of the cluster. In particular, the cluster wanted to draw inspiration from good practices and specialist advisory support and encourage its members to develop new circular economy solutions.

Project objectives

The project was designed to focus on the challenges and opportunities related to circular economy. For the cluster manager, the main objective of the cooperation was increasing practical knowledge and capacity of the cluster members on circular economy solutions guiding them to adopt in their businesses.

Activities undertaken

- ✓ Baseline questionnaire for the cluster companies to understand their activities and knowledge of circular economy concepts.
- ✓ Circular Economy Workshop (CEW) (1) providing baseline level of understanding on circular economy concepts to cluster members.
- ✓ Preparation of guidance document on circular economy business models and how these can be implemented.
- ✓ CEW (2) to improve circular economy opportunities presented by selected cluster members.
- ✓ CEW (3) to present an overview of work undertaken during the project.
- ✓ One day individual support to 5 cluster members to further develop and refine their main circular economy opportunities.

Results and outputs created

- ✓ Identification of circular economy opportunities among cluster members and their further development with assistnace of expert (for 5 identified ideas).
- ✓ Two circular economy case studies.
- ✓ Guidance document providing information on how to identify suitable circular economy ideas and models based on company activities.
- ✓ Impoved understanding of circular economy busines models among cluster members.
- ✓ Improved ideation and identification of circular economy opportunities within cluster members' businesses and industry.
- ✓ Improved collaboration among cluster members through the identification of circular economy solutions.

"The support focused on generating a shared understanding of circular economy and how circular economy business models can be integrated into existing business models." – Business advisor

Cluster organisation: Plastiwin

Cluster sectoral coverage: polymers and biopolymers, elastomers, composite materials and synthetic textiles

Cluster geographical coverage: Wallonia, Belgium

Number of members: 122 members (103 SMEs)

Type of support offered: Direct consultancy to the cluster

Business Advisor for the facility: Anne Grete Ellingsen

ECCP Profile

Main challenges

Plastiwin's main self-identified challenge is to guide the local plastic industry to achieve their sustainable goals by 2050. Among its ambitions are promoting circular economy and sustainability among members, supporting enterprises to increase the recycling rate and the use of secondary raw plastic materials (conventional and bio-plastics), recycling and eco-design. There is a need for Plastiwin to develop a new strategy and Action Plan to consolidate its role in the ecosystem and guide local SMEs' green transitions.

Project objectives

The project started from an assessment of the present situation and needs of Plastiwin. Thereafter, and building on this assessment, the facility focused on supporting the cluster in designing a new strategy and on following up on these actions. Central attention was given to capturing resources, increasing the cluster's visibility and relevance in the local ecosystem, and refocusing its strategic role to better support its members in their green transition ambitions.

Activities undertaken

- ✓ Analysis and discussion of the cluster's actions through the Emerald model.
- ✓ Interactive workshop with the cluster administration to discuss the ecosystem, value chain of the cluster, national and regional stakeholders, and collaboration partners using the Emerald Model.
- ✓ Preparation of framework and financial requirement for the cluster's participation in the key project Industrie du Futur 2020-2024, in partnership with other local clusters.
- ✓ Identification of frontrunners in the cluster for dissemination of experience webinar and training of SMEs to present their cases.
- ✓ Training and coaching the cluster manager in strategic areas, such as self-assessment and stakeholder engagement and dialogue.

Results and outputs created

- ✓ Cluster overall assessment based on the Emerald Model and new Action Plan.
- ✓ New communication strategy and measures to improve the cluster's visibility and stakeholder engagement.
- ✓ A roadmap for the transformation of the cluster and improved readiness for green topics.
- ✓ Support for participation in a strategic regional project in partnership with other local clusters, focused on digitalization and sustainability.
- ✓ A knowledge sharing, discussion and networking session by the sustainability frontrunners during the general plenary meeting of the cluster.

"Thanks to the European expert, Plastiwin has a clear view on our next priorities to allow SMEs to be greener." - Cluster manager

Cluster organisation: Renewable Energy Sources Cluster

Cluster sectoral coverage: Renewable energy and energy efficiency

Cluster geographical coverage: Blagoevgrad region, Bulgaria

Number of members: 41 members

Type of support offered: Direct consultancy/advisory support to the cluster; guidance documents; workshops with clusters facing similar issues/problems

Business Advisor for the facility: Nestor Coronado Palma

ECCP Profile

Main challenges

Key challenges the Cluster's member SMEs are facing are resilience, adaptability and capacity to stay competitive and grow in their contextual national reality. The ResInTech Demo Centre is a newly establish pilot action of the Cluster. Through business development activities and especially its innovation and technology, the Centre aims at strengthening its own capacity to support its members – regional players in the renewable energy sector – in their business model transformation, skills acquisition and investment challenges

Project objectives

The project was designed to support the Cluster's business development on its core activities, specifically on the business and operational model of its newly designed ResInTech Demo Centre. The support focused to the cluster managers, with the main objective of the cooperation being to identify best practices, partnerships and strategies for the Centre's development and implementation. In addition, the support enabled to assess the Cluster's business areas for improvement, identifying current opportunities and defining key priority actions.

Activities undertaken

- ✓ Assessment of the Cluster's current needs and challenges with respect to both the European and national Cluster panorama as well as its core activities, with a focus on the Demo Center
- ✓ Implementation of a learning & exchange workshop with another European renewable energy cluster
- ✓ Benchmarking report of the Cluster activities considering the specificities of the national contexts examined
- ✓ Mapping of opportunities for the cluster considering its current business standpoint and emerging trends relevant to renewable energies in Europe

Results and outputs created

- ✓ An overview of existing global best practices of business models to be adapted to the Cluster Demo Center.
- ✓ An overview of European best practices in terms of cluster business development in the specific field of renewable energies.
- ✓ Contact established with European stakeholders relevant to the cluster's thematic activities.
- ✓ Identification and discussion of possible value-added activities for the cluster's way forward.
- ✓ One final dissemination workshop with the cluster management focused on the cluster's next steps.

"We believe the TGTF advisor's business expertise and guidance have motivated the Cluster for grasping new opportunities and facing challenges in the long run." Cluster project manager

Cluster organisation: Rete di imprese luce in veneto

Cluster sectoral coverage: Lighting and electrical equipment, focus on light engineering and smart lighting

Cluster geographical coverage: Veneto region, Italy

Number of members: 49 members (49 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Lorena Jurado

ECCP Profile

Main challenges

The EU Regulations on eco-design requirements for lighting and energy labelling coming into effect in 2021 bring key changes for producers and end-users of lighting products in terms of energy efficiency and circular economy. These requirements constitute a particular challenge to SMEs, who need support to comply with EU obligations, apply innovations to their products and stay competitive by adopting green and circular business models.

Activities undertaken

- ✓ A cluster value chain analysis mapping the cluster's companies along the value chain.
- ✓ An online survey with cluster members to identify potential cases, contribute to value chain analysis and identify SME needs.
- ✓ Mapping of opportunities based on SME needs and circular economy trends within the EU.
- ✓ Training sessions with cluster managers, addressing circular economy and sustainable business concepts, European framework and opportunities applied to the clusters' value chain.
- ✓ Selection of SME cases and series of meetings to assess needs, objectives and opportunities; and to produce a diagnosis and circular economy strategy for these enterprises.
- ✓ Presentation of SME case studies and sharing of experiences with other cluster members.

Project objectives

Starting from the main challenges faced by the cluster and its members, the project was designed to focus on the challenges related to circular economy to allow for a more effective facility. For the cluster managers, the main objective of the cooperation was to increase their capability on circular economy solutions. For the cluster members, notably SMEs, to develop circular economy strategies for selected enterprises and disseminate the knowledge to all members.

Results and outputs created

- ✓ A cluster needs assessment report according to the mapping of the value chain and opportunities.
- ✓ A new circular economy strategy integrated to the clusters' overall strategy for 2021-2024.
- ✓ Cluster managers trained and mobilized on circular economy concepts, strategies and opportunities.
- ✓ Two diagnoses and needs assessments for cluster SME members, with opportunities and objectives mapped out for these firms.
- ✓ One final dissemination workshop with the cluster members focused on the cluster's circular economy strategy and the SME case studies.

"This approach was very useful for us because it allowed us to collect a lot of useful information to define activities to be proposed to companies starting from their specific needs." - Cluster manager

Cluster organisation: Strategische Partnerschaft Sensorik e.V.

Cluster sectoral coverage: Intelligent sensor and measurement technology, Digitalization and digital transformation, Safety and security, Automotive; Automation, Electronic systems

Cluster geographical coverage: Bavaria region, Germany

Number of members: 80 members

Type of support offered: Direct consultancy/advisory support to Cluster and SMEs

Business Advisor for the facility: Nicolai Sederberg Rottbøll, Wadim Baslow

ECCP Profile

Main challenges

The Cluster's goal is to promote a sustainability strategy in the sensor industry in Bavaria securing the innovative strength of sensor SMEs. Before the TGTF project, an overall view of the state of sustainability competences of Cluster companies was lacking, preventing the support of the development and coordination of individual business initiatives. Among the challenges of the Cluster are the establishment of a "sustainability management" function and the initiation of a comprehensive stakeholder dialog on sustainability across the value chain.

Project objectives

The project was designed to meet a twofold objective: to raise awareness of the topic of sustainability within the Cluster, and to initiate a dialogue with a selected number of Cluster SMEs, that could possibly contribute to bringing forward future sustainability-related activities. For the cluster managers, a first goal of the cooperation was to map some front-runners among member companies and identify their current sustainability competences and challenges. A second goal was to develop a Cluster action plan for the short to long-term actions in the field of sustainability.

Activities undertaken

- ✓ An exploration of member SMEs interested in bringing forward a sustainability-oriented discussion within the Cluster
- ✓ Two workshops focused on assessing the status quo/baseline of performance of member SMEs in terms of sustainability: Existing Assets and Capabilities & Performance pressures, challenges, and goals
- ✓ Two workshops forward looking/focused on the future of the Cluster in terms of sustainability outlook: Improving performance (short-term, medium-term) & Value gains (long-term)
- ✓ A session with Cluster managers to define the key actions for the Cluster's greening journey beyond the TGTF project

Results and outputs created

- ✓ Identified and mapped strengths, existing activities, assets and capabilities of a selected group of member SMEs that can be leveraged in potential sustainability-oriented opportunities
- ✓ Gained an understanding of external and internal sustainability challenges and pressures with respect to selected SMEs' business models
- ✓ Plotted aspiration, wishes and goals of selected SMEs, as well as priority areas for improvements on which the Cluster's services could focus
- ✓ Defined an action roadmap as a guiding policy for sustainability-oriented actions through which the Cluster can support its members' green.

"This approach was helpful for us: we were able not only to gather a lot of valuable new information, but also to define concrete activities with our members. The jointly developed roadmap generates strong commitment - and is therefore a good basis to really work on the current challenges and

Cluster organisation: TECES, Green Tech Cluster

Cluster sectoral coverage: Manufacture of electrical equipment

Cluster geographical coverage: East Slovenia (Slovenia)

Number of members: 46 members (27 SMEs)

Type of support offered: Competence development

Business Advisor for the facility: Nicolai Sederberg Rottbøll, Wadim Baslow

ECCP Profile

Main challenges

- General lack of knowledge amongst Slovenian SMEs about resource sustainability;
- Gaps in the understanding of resource efficiency and green transition practices/approaches of SMEs and their value chains;
- The need of achieving a greater energy efficiency, better product waste management and a more efficient use of materials among Slovenian SMEs;
- The need of turning green transition into business opportunities.

Activities undertaken

✓ Periodic meetings between the cluster staff and the Business Advisor;

✓ The definition of the concrete concept of a tech-talk cycle;

✓ An online Tech-talk about "How Green is Your Business?";

✓ The identification of five European clusters with which TECES could collaborate;

✓ Cluster matchmaking meetings.

Project objectives

- Improving the knowledge of Slovenian SMEs regarding the adaptation of business strategies to climate change;
- Disseminating the energy efficiency of products and services;
- Promoting the awareness among Slovenian SMEs on the importance of having circular business processes;
- Developing a sustainable members engagement program.

Results and outputs created

✓ The implementation of a pilot Tech-Talk with TECES members about going "from green to business";

✓ Identification of the main obstacles in the adoption of green practices faced by the cluster members;

✓ Interaction with clusters which are facing similar challenges on issues related with the green transition and could be interested in developing partnerships with TECES.

"We experienced that there is a huge need for more programs such as TGTF. Many of the small and medium sized companies are just getting started with sustainability management, and often the first question was how to get started. TGTF helped to have this conversation." – Business Advisor

Cluster organisation: Venetian cluster

Cluster sectoral coverage: Productive supply chain for the conservation, restoration and valorisation of Cultural and Environmental Heritage (main coverage)

Cluster geographical coverage: Veneto region, Italy

Number of members: 115 members

Type of support offered: Direct consultancy/advisory support helping to execute specific projects with SMEs; online webinars.

Business Advisor for the facility: Eleni Feleki

ECCP Profile

Main challenges

Acquiring information and developing competences to increase business processes, sustainability and resource efficiency is often challenging for industrial stakeholders. To contribute to the regional industrial transformation, the Cluster aims to become a reference and guidance entity for its members on the subject. This is to be done by establishing a small team of experienced persons able to provide professional answers and support to SMEs as well as structured services such as CO_2 monitoring, LCA and carbon footprint analysis.

Project objectives

Starting from the needs expressed by the cluster managers and engaged member SMEs, identified through the first project actions, the trainings actions were designed to deliver contents, tools and methods based on which the Cluster can further develop and provide circularity-related advisory services in a structured fashion to its members. For the cluster managers, the main objective of the cooperation was to increase their own capacity to guide and manage such structured services. For SME representatives, the objective was to involve them in an early discussion on circularity needs in their business context.

Activities undertaken

- ✓ An online survey with interested members assessing their familiarity and preparedness with sustainability and circular economy principles
- ✓ A workshop to identify respondent SMEs' specific needs in terms of business circulatory and potential services to be developed by the Cluster
- ✓ Four training webinars for cluster managers and selected SME representatives on the topics of sustainability principles, best practices and action planning for circular transformation and CO2 offset
- ✓ Development of a practical toolkit for the Cluster

Results and outputs created

- ✓ An assessments of cluster SME members' needs in terms of understanding circularity principles and competences to be developed
- ✓ A proposal for the development of Cluster services to its members based on the assessed needs
- ✓ Cluster managers and SMEs representatives trained and mobilised on circular economy concepts, strategies and tools
- ✓ A guidebook providing a working methodology for the Cluster to define a SME's path towards contributing to the circular economy
- ✓ A Roadmap for the Cluster's overall strategy towards a green transition

"Besides the technical content, it was insightful to see how the expert organised the meetings with the cluster and the SMEs, the tools used to work together and to have a relaxed group." - Cluster manager

Cluster organisation: Wood Industry Cluster Slovenia (WIC)

Cluster sectoral coverage: C16 Manufacture of wood and of products of wood and cork, except furniture; C31 Manufacture of Furniture

Cluster geographical coverage: West & East Slovenia (Slovenia)

Number of members: 92 members (85 SMEs)

Type of support offered: Advisory support for the cluster and SMEs

Business Advisor for the facility: Mouazan Erwan Denis David

ECCP Profile

Main challenges

The main challenges is to link the digital transformation with the introduction of a circular economy and to complement existing business models and develop ones in line with the twin transition. This is due to insufficient examples of good practices in introducing circular economy concepts as well as due to the need to ensure conditions for sustainable competitiveness, while implementing the requirements of circularity and environmental protection

Project objectives

The aim of the cluster was to understand the requirements of the transition to a circular economy and based on that plan the transition to a circular economy in light of the digital transformation. A particular ambition of the cluster is to support its members to transform their business models and product as well as to help them acquire the necessary knowledge and skills and find possible links in the value chain through a cross-sectoral cooperation. All in all, this should achieve a greater resilience to upcoming changes.

Activities undertaken

- ✓ A capacity building training for the cluster team addressing circular economy and green business models.
- ✓ A showcase toolkit in order to support the development of a future WIC Competence Centre for HR development.
- ✓ The identification of successful cases of SMEs implementing circular principles
- ✓ Co-creating and supporting the development of a program of workshops which will take place after this support service.
- ✓ The application of the assessment tools to two pre-selected SMEs

Results and outputs created

- ✓ Cluster members trained and mobilised on circular economy concepts and strategies and on green business models
- ✓ A Circular Economy Transition Handbook "Managing the Transition to Circular Economy in the Wood Sector" with best practices for the wood industry
- ✓ Two diagnoses and needs assessments for cluster SME members.
- ✓ One final workshop with the cluster members and policy makers entitled "CIRCULAR ECONOMY - how to tackle it?"

"For us, this program was definitely very useful and helped us in creating active support for our members!" - Cluster manager

04

Cross-cutting synergy webinars

Results from the three webinars with clusters and experts

4. Cross-cutting synergy webinars

4.1 Overall reflections on the TGTF cross-cutting synergy building webinars

The preceding chapters clearly demonstrated that the TGTF has been enabling a highly wide variety of activities, actions, events and outputs – all under the **overall objective of equipping clusters managers to support the sustainability and resource efficiency of their members**. Despite the existence of this common objective, in many ways, the support provided by the TGTF has been varied enough to accommodate for the differing needs and contexts in which the clusters exist and operate in. **Nevertheless, based on close monitoring of objectives, activities and outputs, the TGTF team was able to identify a significant wealth of commonalities and synergies.**

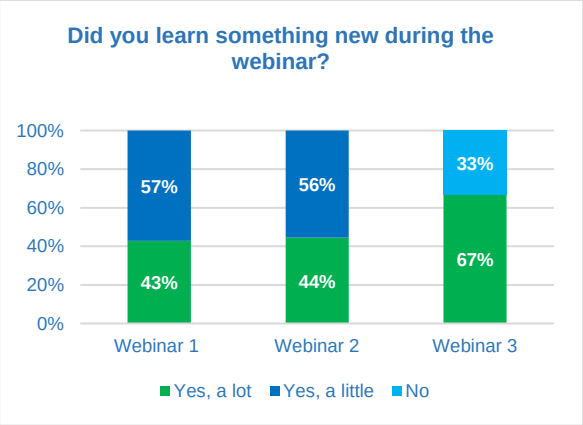
Thus, based on the **consolidation and analysis of all relevant documentation** (i.e. the applications, Cluster Service Agreements, progress reports and outputs), **we mapped, summarised and assessed** the support services provided under the TGTF. As a consequence, we were able to identify and develop (on an ongoing basis) a series of ideas and proposals on how to develop lessons learned, utilise best practices and methodologies, share common tools and approaches and be encourage clusters to be inspired by other activities/events that have been carried out. Thus, the **TGTF launched three cross-cutting support webinars with the following objectives:**

- Disseminating the findings and providing opportunities for synergies
- Delivering additional expertise to the clusters
- Engaging the TGTF cluster managers and experts to create and sustain a thriving community of practitioners, who would ultimately continue the drive towards sustainability even beyond the end of the TGTF.

An average of 50 participants participated in each of the webinars (a consistent figure across all three webinars), which demonstrated the high interest among experts and cluster managers to engage in cross-cutting webinars, helping to tap into synergies and add further value to their TGTF journey. Overall, clusters and experts expressed rather positive impressions of the webinars through the feedback surveys. Specifically, in terms of the usefulness and relevance of the webinars, the results of the feedback surveys demonstrated that all three webinars were of **significant value to the majority of the participants.** In this regard, the respondents have unequivocally expressed the perception that valuable knowledge was shared during the webinars, serving to further motivate and guide their sustainability efforts under the TGTF.

More concretely, **Figure 7** showcases an increasingly positive level of impact that the webinars had in terms of **developing the skills of the participants.** This should, to a large extent, be attributed to the increasingly interactive nature of the webinars.

Figure 7: Usefulness of the content of webinars



4.2 Webinar one: Enhancing sustainable business models & exploiting relevant knowledge developed during the TGTF

Basic details	Objective of the webinar
Date: 24th September 2021 **Time:** 09:15– 12:00h CET **Number of attendees:** 51	**The overall objective** of the webinar was to provide the TGTF clusters with additional useful material and expertise to further inspire, guide and fine-tune their activities and outputs that will be developed in the remainder of the TGTF journey.

In the design and planning of this first webinar, we pursued three underlying motivations to attain the overall objective:

- Firstly, the need to provide fresh inspiration to the clusters and their experts through giving them complementary expertise on how to develop sustainable business models.
- Secondly, the usefulness of sharing and discussing some key findings from the different needs assessments and sector analysis to harness cross-learning.
- And finally, the utility of sharing and discussing the various opportunities and practical lessons learnt, in view of determining common practices that are broadly applicable to clusters for the remaining duration of their support.

Summary of main sessions, speakers, and takeaway points

This webinar was divided into three sessions.
In session one, Tahmina Shafique kicked off the webinar reflecting on the process and progress made so far. Bianca Dragomir, CEO of AVAESEN CleanTech Cluster and founder of Clusters for Change, shared best practices around innovative and proven **methods to design and implement sustainable business plan models.** Key takeaways were:

- Clusters' opportunities in the green transition stem from the fact that they can agglutinate inputs from all stakeholders and catalyse rapid change. This creates a ripple effect and a virtuous cycle in the larger economy.
- Clusters' challenge is to reimagine business models, so they are both financially and environmentally sustainable.
- Some emerging models for clusters are collaborations between clusters and cities, start-ups, new industries, governments, and academic institutions.

In session two, Pouyan Maleki, TGTF Expert & Ecorys Sustainability Consultant, moderated an interactive session whereby a number of successful outputs and activities already developed under the TGTF were showcased with the objective of **promoting synergies and guiding clusters and respective experts in the next steps** of the TGTF. Key insights included:

- **Green transition in cities**: Sofia Knowledge City designed a model of what would be the ideal urban green economy.
- **Handbook**: DITECFER developed a handbook for supporting the green transition in the rail industry, which includes an assessment of the impact of the railway value chain in the environment, an analysis of the organisation of the sector, and examples of possible actions.
- **Green communication strategies**: IDiA developed a communication strategy with the objectives of supporting the design and development of new green projects, positioning the cluster as a relevant stakeholder, and attracting new members.
- **Repository of information**: As part of its green communication strategy, IDiA developed information repositories with the aim to compile "building blocks" for companies to inform themselves about the green transition, business models, funding opportunities, etc.
- **Identification of challenges and recommendations for a sector**: Balears.t conducted an analysis of the challenges that the tourism sector faces in the Balearic Islands, and several recommendations to accommodate the sector within the green transition were made.

In session three, Bianca Dragomir highlighted the importance of **developing cluster roadmaps for the green transition.** She explained how they could drive transformational change and provided participants with a methodology for developing their own roadmap. Clusters were tasked with preparing their own roadmaps to be shared at the final webinar.

Key achievements and feedback

The webinar brought together both the group of cluster managers and TGTF experts into one forum for the very first time. This was instrumental in **establishing a genuine sense of a TGTF community** and helped to broaden individual networks and contacts through the participation and direct recognition of various individual cluster managers and their respective experts.

Additional messages portrayed to the clusters during the webinars was that the **need to empower and involve SMEs** in order to maximise the impacts of TGTF lessons. Attention was also drawn to the **benefits of utilising EREK** (European Resource Efficiency Knowledge Base) as a reference point on business competitiveness. Furthermore, the possibility of dissemination of TGTF activities with local and regional authorities to explore future opportunities for greening. This was reflected in a poll that was

carried out during the webinar and showed that most clusters believe that there is a **relevant role for clusters to help municipalities in implementing their sustainability plans**.

In terms of the feedback to the webinar (7 responses received), overall, the first cross-cutting webinar proved to be useful. The majority of survey respondents found that the webinar provided them with new insights for developing sustainable business models. Furthermore, respondents also found it valuable to learn about the activities being developed by their TGTF peers (see Figure 8 and Figure 9).

Figure 8: Usefulness of keynote on business models

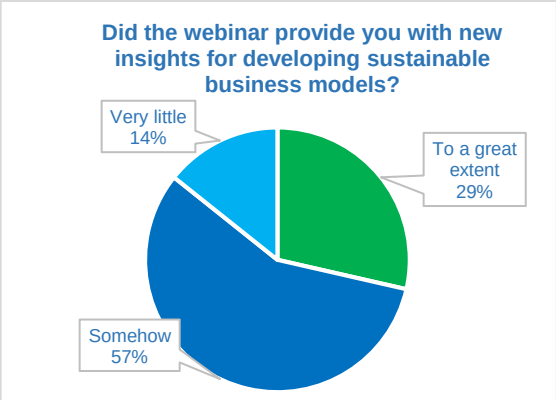
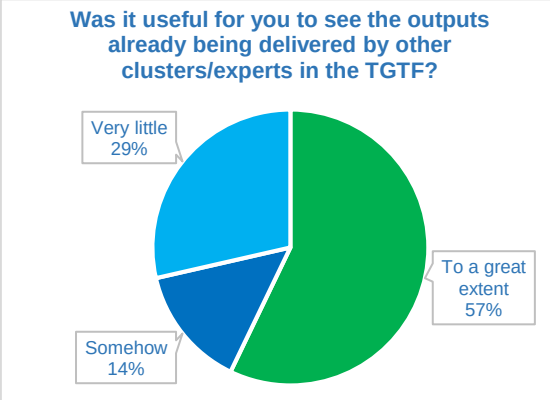


Figure 9: Usefulness of showcasing TGTF activities/outputs



4.3 Webinar Two: Enhancing Sustainable Business Models & Exploiting Relevant Knowledge Developed in TGTF

Basic details	Objective of the webinar
Date: Monday 18th October 2021 **Time:** 09:15– 12:00h CET **Number of attendees:** 52	**The overall objective** of the webinar was to promote mutual learning and lessons learnt to facilitate/optimise the finalisation of the outputs and activities.

In the design and planning of the second webinar, we envisaged two specific activities to work towards the overall objective:

- Firstly, to provide a platform for the clusters and experts to showcase to one another what activities they have been working on, focusing specifically on what has worked well and can potentially be adopted by other clusters as well as what specific lessons or insights have been gathered which ought to be considered by others in the TGTF.
- Secondly, to harvest collective wisdom and energise the TGTF community. This was achieved by exploiting participatory leadership methods by means of organising a number of breakout sessions structured following the type of activities clusters were developing under the TGTF.

Summary of main sessions, speakers, and takeaway points

This webinar was divided into two main sessions.

In session one, Pouyan Maleki, TGTF Expert & Ecorys Sustainability Consultant moderated an interactive session during which the **cluster showcased their experiences with the green transition**. This exchange of best practices and success stories (in particular from involving SMEs) was done with the aim of encouraging participants in considering new ideas on how to involve and support their members. The following insights were provided:

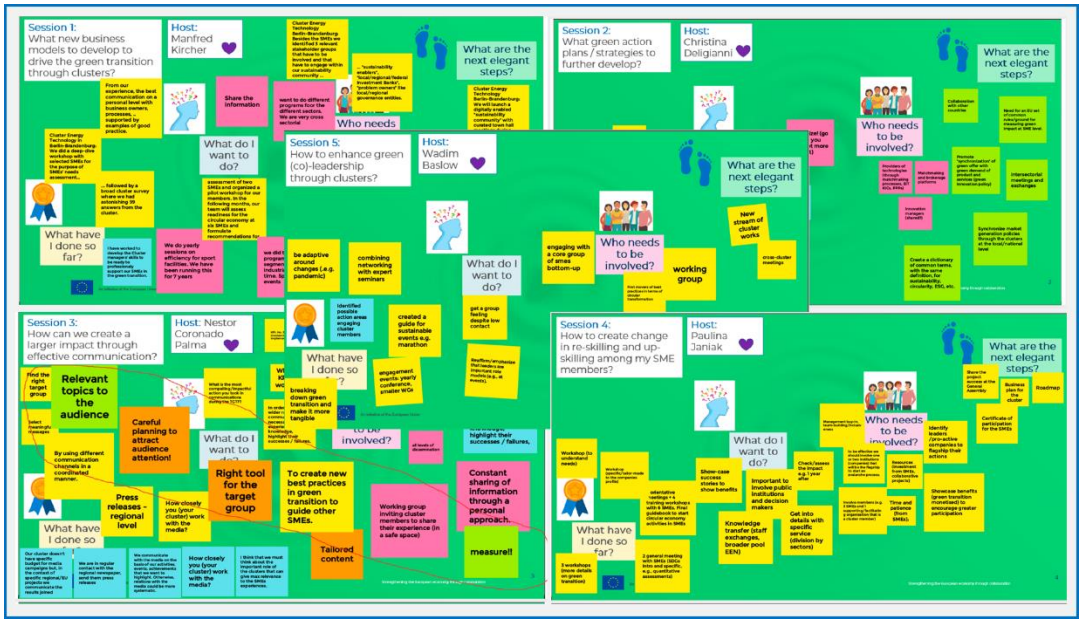
- **The Lombardy Green Chemistry Association** highlighted how they provide the skills and knowledge to successfully survive the valley of death challenge. They do so by helping to tap into new financing opportunities, by providing technical support and by creating circular business models.
- **The Clusaga cluster** works on developing SMEs capabilities and resources within their cluster by providing innovation support and intelligence services. They also support SMEs in defining roadmaps to go through the greening process and ensure sustainable growth over time.
- **The Venetian Cluster** supports networking through the engagement and involvement of different actors (SMEs, universities, public bodies, etc.). The cluster organised several sessions to present companies with technical procedures and opportunities to exploit the circular economy.
- **The Wood Industry Cluster** developed a series of pilot assessments, best practices, workshops and training to support the circular economy transformation among its SMEs.
- **The Venetian Lighting equipment cluster** created a green transition strategic plan to support SMEs, which includes collaborating with other clusters and universities.
- **The Lublin Eco-Energy Cluster** advises waste management companies on new technologies to advance towards a circular business model.
- **The Sofia Knowledge City cluster** collected data from cluster members and identified three dimensions for support. These include transforming the cluster into a green transition reference in the city, coaching SMEs in business opportunity identification, and developing individually tailored SME action plans.

In the second session, Bianca Dragomir invited participants to **five break-out sessions on a selection of green transition topics** themed after the type of advisory services clusters received. Each of the breakout sessions was moderated by one of the TGTF experts with relevant expertise in the area. Participants were able to jump between breakout sessions in order to listen in to the conversations or share their insights on the topics, thereby generating collective wisdom among participants. The key findings of each of the breakout sessions were summarised and presented by the experts in front of the broader group after the breakout sessions were completed.
These key findings were the following:

- #1 - **The resilient business models session** addressed individual business plans and SMEs. Externalities were identified as the main obstacle for SMEs to achieve sustainable models.
- #2 - **The green action plan and strategy** session identified the need for a common set of tools to provide action plans for SMEs, e.g. in the form of a handbook of tools with information on regulations and policies since the current legislation and initiatives that exist tend to overwhelm and hinder SMEs from developing green strategies.

- #3 - **The green communication session** identified the need to find an interesting and relevant theme for the general audience when communicating on green topics. In this regard, it was concluded that to create a larger impact, the topics communicated should be relevant for the audience, and the right tool should be used for each target group.
- #4 - **The session on improving the skills of SMEs** focused on transferring knowledge between cluster members and beyond. For promoting SMEs to engage in the green transition, the value of it should be more directly showcased by clusters and financial opportunities to enable this should be identified and presented.
- #5 - **The green (co-)leadership** session identified the importance of engaging with a core group of SMEs. There is a need for clusters to play a decisive role in leading the green transition agenda of their members, for example, by holding regular events and keeping the conversation about the green transition alive.

Figure 10: JamBoards from the breakout sessions (Full images in Annex II)



Key achievements and feedback

The main achievement of the webinar was the further reinforcement of the TGTF community through the participatory leadership approach and the gathering of collective wisdom by cluster managers and experts during the breakout sessions, providing yet another opportunity for more direct exchanges. Moreover, many interesting lessons were shared during these breakout sessions on the five green transition themes (as listed above).

In terms of feedback to the webinar, the second session seems to have been a highly useful webinar as no negative answers were recorded at all. All nine survey respondents affirmed that they were satisfied or very satisfied with the webinar, as shown in Figure 11. This is likely due to the enhanced interactivity of the webinar, whereby all participants were required to actively engage, contribute and learn. This positive interpretation is further justified in Figure 12, whereby breakout sessions received positive feedback from all nine respondents, and well over half of them affirmed that they were helpful

and engaging. Thus, a **key lesson learned** is that highly interactive and well-prepared breakout sessions, which are moderated by relevant topical experts, can be a key means of improving the usefulness and sense of satisfaction amongst a group of participants.

Figure 11: Satisfaction of Webinar 2

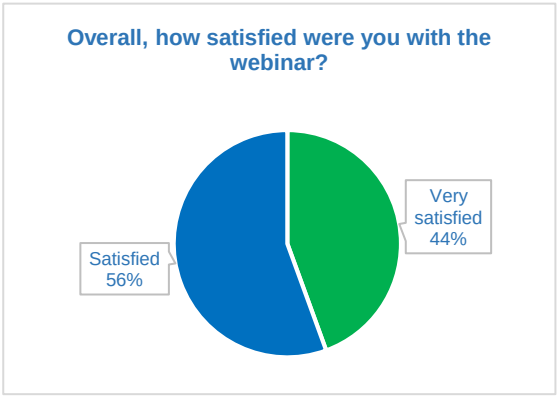
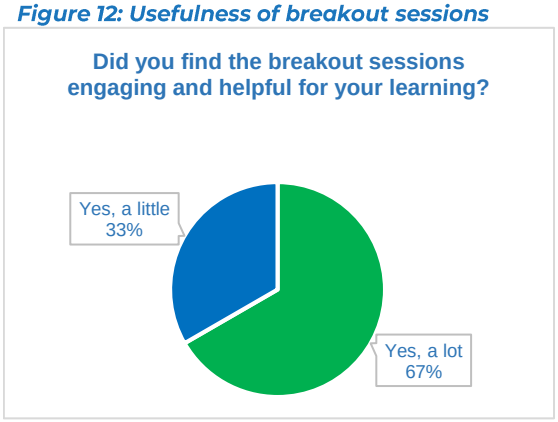


Figure 12: Usefulness of breakout sessions



4.4 Webinar Three: Clusters & greening beyond the TGTF

Basic details	Objective of the webinar
Date: Friday 5th November 2021 **Time:** 09:30– 12:00h CET **Number of attendees: 49**	**The overall objective** of the webinar was to help shape and motivate future actions of the clusters (both within the TGTF and those in the ECCP) on greening and sustainability.

In the design and planning of the final webinar, we developed three key activities in order to achieve the overall objective of equipping clusters managers to support the sustainability of their members:

- The first was a presentation on how clusters can tap into private and funding to enhance their greening and sustainability visions and objectives.
- The second was to provide a reflection on the key success stories and achievements of the TGTF by means of an interactive session with the cluster managers and experts (who had been asked to prepare prior to the webinar some key messages to be shared with the group).
- And the last was orientated around inspiring and guiding the clusters and on how to further develop and implement roadmaps and actions plans for continuing their efforts on sustainability and greening beyond the TGTF.

Summary of main sessions, speakers, and takeaway points

This webinar was divided into **three main sessions.** In the first session, Paulina Janiak, TGTF expert, provided a keynote speech on **how to improve and balance cluster financing** through private and public finance for greening activities. Key messages were the following:

- Cluster financing mixes have been significantly evolving over the last decade, and now membership financing is considered as one of the most desirable income sources due to its

stability providing clusters with the flexibility to provide new services such as greening activities.

- Cluster managers need to think about how to redesign membership fees, assess which services are necessary and which could be eliminated or outsourced, and try to attract new partners. In other words, a costumer-centrism mentality is required.
- Planning for the medium and long term is important, including a budget, future targets, actions, etc.
- New green financing opportunities include EU resources of significant amounts (e.g. Green Deal, Next Generation EU, InvestEU, etc.), but also equity, investment funds, loans, etc.

In the second session, Pouyan Maleki, moderated an interactive session during which **cluster managers looked back and shared their main successes** during the TGTF, followed by a discussion on the achievements of the facility. Key successes shared included:

- **Cluster Energy Technology Berlin-Brandenburg** explained that as a result of the TGTF, they had already started building a sustainability community and explained how the expert had greatly helped in self-reflecting on the cluster's sustainability situation.
- **The Renewable Energy Cluster** shared how the expert had provided them with many ideas and resources to expand the cluster and develop a more sensible business strategy.
- **Clusaga** explained how they had greatly improved the relationship with the members most interested in the green transition and thereby increased overall engagement.
- **The Venetian Cluster** shared how TGTF had allowed them to better understand their SMEs needs and receive expert advice on how to address these needs.
- **DITECFER** explained how the expert had helped them prepare a sustainability handbook and to draft a plan for their next actions in the short, medium and long term.

Figure 13 presents some of the key successes submitted during the session.

Figure 13: JamBoard with the key successes shared by clusters

In the final session, Bianca Dragomir, moderated a session whereby **five clusters presented their roadmaps on their green ambitions and actions beyond TGTF**. The roadmaps were developed as part of the TGTF and asked clusters to think about how to make further use of the lessons learned. The clusters presenting were INDESCAT, Clusaga, Cluster Energy Technology Berlin-Brandenburg, the Venetian Cluster and Balears.t. After each presentation, the floor was opened for feedback from the participating experts and clusters.

Key examples of components of transformational roadmaps that were showcased included:

- Medium- and long-term plans to search for projects to obtain new funding opportunities and to significantly improve members' energy efficiency;
- Establishment of a partnership with a sustainability consultancy to perform an impact assessment that will serve for a strategy redesign;
- Creation of a structured service on sustainability that can effectively advise members;
- Plans to accompany five SMEs through their 2025 roadmaps towards sustainability.

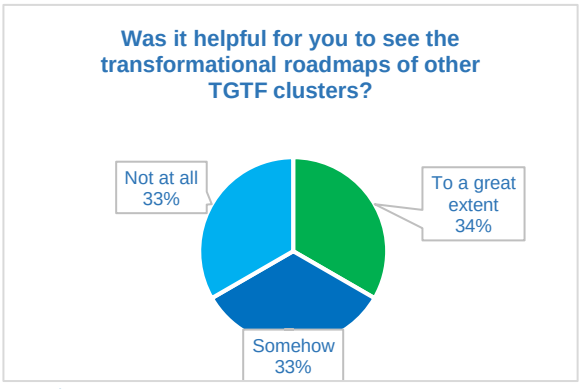
Key achievements and feedback

The key achievement of this webinar was to provide **guidance and motivation to the clusters to continue their greening and sustainability efforts beyond the TGTF** (i.e. through the positive reflections on the facility and through the development of transformational roadmaps). This was crucial to ensure long-lasting impact as well as to optimise the value of the services provided during the facility.

In terms of the **feedback**, this was somewhat mixed, which is largely explained by the fact that there were only three respondents to the feedback survey. Two third of the participants were satisfied, and one of them was dissatisfied with the webinar, as showcased in Figure 14. The unsatisfied respondent did not find the topics covered adequate and did not believe that seeing the transformational roadmaps of other clusters was useful (see Figure 15). A **key lesson learnt** here is that, towards the end of such a technical assistance facility, there is significant merit in encouraging participants of the facility to plan for the continuation of their efforts beyond the expiration of the support in order to ensure medium- and long-term impact (as opposed to only a short-term impact).

Figure 14: Satisfaction of Webinar 3

Figure 15: Usefulness of sharing on cluster roadmaps



05

Future Outlook and lessons learned

Monitoring, feedback and lessons learned

5. Future Outlook and lessons learned

In this final chapter, we take a closer look at the implementation of advisory services. In particular, we reflect on strategic and operational aspects with the goal of providing ideas and inspiration for practitioners, future advisory service providers, amongst others, on stimulating meaningful impact with clusters and their members. We present these tips and tricks in four separate sections:

- Preparing and launching the facility;
- Application and selection process;
- Implementing the facility;
- Closing the facility and ensuring a lasting impact.

Throughout these sections, we present in short boxes a selection of 12 lessons learned that can help in implementing advisory services. Table 1 provides an overview of these 12 lessons.

Table 1: Overview of lessons learned for advisory services

Lesson learned
#1 – **Understanding the needs** of the target group through a needs assessment
#2 – **Facilitating applications** through guidance documents and easy-to-follow application procedures
#3 – **Addressing individual needs** at cluster or company level through individual learning paths
#4 – **Planning for back-up** with additional advisors and backup candidates
#5 – **Use of interviews** to confirm selections of advisors
#6 – **Community building** to complement individual learning paths through joint sessions
#7 – **Integrated and flexible progress monitoring** to allow participants to focus on training activities
#8 – **Duration of business advisory services** suited to the complexity of the facility (usually 3 to 9 months)
#9 – **Targeted support to SMEs** and their supporting frameworks to build capacity for change
#10 – **Being aware of the heterogeneity of the participants** in your advisory service
#11 – **Planning from the start on how to create impact beyond the facility** to ensure a lasting impact
#12 – **Celebrating achievements** reminding participants of their learnings

5.1 Preparing and launching the facility

The objective was to **develop and implement a technical assistance facility in support of cluster actors**. For the technical assistance facility, the original approach focused on implementing the initially foreseen SMEs Go International technical assistance facility along the line of two key elements:

- A solid and tested methodology for selecting high-quality, high-potential projects in need of the support offered;
- An approach for the provision of technical assistance that engages the most appropriate experts and is centred and tailored around the needs of the selected projects.

However, given a low response rate to the initial two calls for applications and reflections on the project design, this component was redesigned to cater to support clusters with a specific focus on green transition advisory services. It became apparent that while the concept for the initially foreseen technical assistance facility had been well designed, it was developed in isolation of the actual needs of clusters and their members.

Box 5.1 – Lesson learned #1 and #2: Understanding the needs of the target group and facilitating applications

Despite two attempts at launching it, the initial SMEs Go International facility did not take off. What were the reasons for that? Besides the start of the COVID-19 pandemic lowering the appetite for SMEs to internationalise, we identified three other main reasons:

1) the entry barrier was set too high, with one eligibility criteria being to have an existing business partnership with a company in a third country; 2) the burden of proof was also too high for most SMEs to spend time on an application with unclear results and added-value to their daily business; and 3) targeting only ESCP-4i and Horizon 2020 INNOSUP 1 project, but not the broader cluster community.

In response, two actions were taken:

- **Conduct a more in-depth needs assessment** through a webinar and survey with clusters to better understand their and their members' evolving needs;
- **Broadening the target group** by addressing the whole ECCP community and doing so through clusters instead of SMEs to make use of the existing support structures to reduce the burden on companies while clearly requesting applicants to highlight how results will be transferred to their members.

These actions allowed us to identify the high need for a support facility on implementing the green transition with a particular focus on resilient business models and resource efficiency. Therefore, a **key lesson is to avoid designing support facilities in isolation of the needs of the target group, but instead develop it based on a needs assessment** to ensure interest as well as positive impacts by addressing actual needs.

Building on this successful approach, one could also consider for the future a two-pronged approach, which simultaneously provides cluster and direct SME support.

5.2 Application and selection process

The new Towards Green Transition facility was conceptualised at the end of 2020 and the start of 2021 based on the needs assessment with cluster managers identifying the green transition, resource efficiency and circular business models as topics of high interest. The TGTF was then successfully launched in February 2021. However, understanding the overall needs is only one part of a successful advisory service. In addition, it is key to ensure that **support is tailor-made to the individual needs of participants in order to create maximum impact**. Therefore, a careful application and selection process is important to identify individual challenges and barriers.

The call for expressions of interest was opened in February 2021 together with an application package (guidance document, FAQ, etc.) supporting the clusters in their applications (for more information, see Chapter 1). In the application, we asked applicants to carefully describe their cluster's green ambitions, their members' needs, as well as explain key challenges and indicate the type of advisory services needed as well as the expected impact on the clusters and SMEs. Having this information not only allowed us to ascertain the preparedness and sincerity of applicants but also to better understand their individual challenges and develop tailor-made advisory services.

In parallel to the launch of the cluster application process, a call for experts was launched to collect expressions of interest from business advisory and sustainability experts who would be able to support the clusters during the facility. We received 71 cluster applications and over 300 applications from experts and business advisors.

Box 5.2 – Lesson learned #3: Addressing individual needs at cluster or company level

Having detailed information on the specific needs, challenges and ambitions of each applying cluster allowed us to better understand individual cluster needs. This helped in preparing the advisory services, matching clusters to the suitable experts as well as later on for the experts and our coordinators to design individual learning paths that address these needs and help the clusters in working towards their green ambitions.

Once applications were received, and the call closed, we started by selecting the 25 projects and then matching them with experts. Based on the information received in the cluster applications, we reviewed more closely the needs of each selected cluster and, by using a keyword search, identified a number of experts for each of the 25 selected projects. After this initial matching, a more detailed review was done by also reviewing the CVs of the pre-selected experts in order to select the best-suited candidate and alternative backup candidate(s).

Finally, the primary expert candidates were interviewed in short calls. It was useful that the call for experts already included filtering options such as experiences in the type of advisory service, field of expertise, regional understanding, SME orientation amongst others. Given the sheer number of interviews of experts, it was critical to streamline the process – therefore, each expert were presented with the problems and needs of the clusters they had been matched to (without specifying names or sensitive information) and were asked to pitch their idea on how they would support the cluster. In case the response was not sufficiently convincing or there appeared a mismatch between the expert and the clusters needs, alternative candidates were interviewed until a suitable expert was found. These short interviews allowed us to get a better feel of the experts and if they would be able to provide an added value in a relatively short amount of time to clusters and their members. Similar interviews were considered with the clusters before making the final selection. However, these were not feasible due to the short amount of time and would have also complicated the scoring and selection of applicants.

Box 5.3 – Lesson learned #4 and #5: Plan for backup and confirm selections through interviews

Both when selecting clusters and experts to participate in the facility, **we selected primary and backup candidates**. This proved in both cases useful. For the 25 TGTF projects, we had one cluster that was too slow to respond to a clarification request, and another turned out to be non-eligible after a clarification was received. Similarly, for the experts, we matched to each project several experts, one primary candidate and several backup candidates. One expert was not able to participate for personal reasons, and later on, another turned out to not fit the cluster needs after all. Both for the clusters and experts, we were able to replace them with backup candidates on relative short notice.

Based on a short application and a CV, one can identify if an expert has the right qualifications as well as sufficient years of experience. However, it is impossible to judge the right expertise, character and spirit. Preferably, business advisory experts that are supposed to work directly with clusters and SMEs should be proactive to come up with solutions and energetic to engage participants. An **interview is a simple method to check if a potential expert has not only the knowledge but also the initiative and drive required**. Equally, it is key that the interviewer has extensive experience and knowledge in running such facilities and working with business advisors to be able to make a robust judgement. Due to these reasons, interviewing each short-listed expert and making the selection based on the interviews proved rather successful as nearly all experts turned out to be a great fit with their cluster.

Overall, the selection process was quite time-consuming as applications needed to be open for sufficient time, and then we needed to go through several rounds, while the matching of experts needed to wait for the selection to be final. The selection was completed in April 2021, just in time to launch the facility before the summer months. Figure 16 summarises the separate steps in the process of selecting the 25 TGTF projects and matching them with experts.

Figure 16: Overview over the selection process of the 'Towards Green Transition' Facility

At the end of the selection process, we drafted recommendation letters for the 25 selected projects, which summarised their application, the scoring and, most importantly, provided ideas and suggestions for targets and activities to be implemented based on their individual needs.

5.3 Implementing the facility

Launching the facility and monitoring progress

In May 2021, the winners of the facility were announced on the ECCP website. Simultaneously, clusters received from us their recommendation letter with the proposed targets and activities. In this message, clusters were also invited to an orientation session. Meanwhile, selected experts were also informed about the start of the facility and received information on the clusters they would support. They also received the recommendation letter for their preparation and received an invitation to a separate orientation session.

During the orientation sessions, clusters and experts were informed about their TGTF journey, outlining the duration of the support as well as explaining the milestones, reporting requirements and roles and responsibilities. This had the dual purpose of informing everyone about the facility and providing room for questions as well as creating a community. To build on this momentum, shortly after the orientation, both the clusters and experts of the TGTF were contacted by our TGTF coordinators (each project had a supporting coordinator) to set up individual kick-off meetings for each of the 25 projects. During these kick-off meetings, each project developed a Cluster Service Agreement (CSA) containing a set of KPIs and a clear work plan. The expert, cluster, and TGTF management agreed on a work plan, activities and outputs. These CSAs, once finalised, were signed both by the TGTF management and the cluster managers in order to create a certain commitment to work towards the agreed targets.

Box 5.4 – Lesson learned #6: Complement individual learning paths with joint sessions to create a community

From the start, we aimed to create a community between the TGTF clusters and experts. We, therefore, brought the whole TGTF community therefore together several times, starting with the orientation sessions, but then also in three cross-cutting synergy webinars (see Chapter 4).

This provided clusters with **a mix of tailored individual learning paths consisting of activities targeted at their needs as well as opportunities to exchange with other clusters on their activities to learn about common challenges and get inspired** by what other clusters and their experts are doing. The individual learning paths were written down in the CSAs, while the joint sessions were announced at the outset of the facility during the orientation sessions. To further increase participation, it would have likely been beneficial to set the dates of the cross-cutting webinars already at the start of the facility and announce them during the orientations sessions, in order to further increase the number of participants.

In order to monitor progress, the TGTF team directly interacted with the 25 projects by assigning to each a project coordinator who would drive the process and ensure smooth collaboration between the expert and cluster team. The TGTF coordinators were briefed in a separate orientation session about their tasks at the start of the facility and had the opportunity in subsequent sessions to report back as well as ask questions or discuss any issues encountered. In addition, clusters were requested to fill in a monthly progress report to update on activities and note any delays or challenges. This progress report was developed as a simple excel template (see Annex I) that a cluster could easily fill in based on the work plan in their CSA and then easily update on a monthly basis. This reporting ensured that clusters kept the deadlines in mind, while the direct monitoring through the coordinators ensured that we could identify issues early on and directly support the cluster and expert. With this approach, we aimed to keep the administrative burden on clusters and experts light, so they could focus on implementation. Throughout implementation, we received only from one cluster that less paperwork would have been great.

Box 5.5 – Lesson learned #7: Integrated and flexible progress monitoring

Integrating progress monitoring directly with the cluster through dedicated project coordinators proved rather helpful as we had direct contact with the clusters and experts throughout the project and could easily be updated whenever there were any issues or successes to share instead of having to wait for the monthly progress report. In addition, the coordinators could also easily disseminate information to the clusters and experts as well as remind them of deadlines or webinar dates. Finally, project coordinators were also able to support their projects in more organisational tasks such as organising meetings, keeping track of decisions and actions, as well as organising additional capacity where needed (e.g. for translations or interpretations or for research). This allowed us to also be flexible with the progress reporting, as in many cases, clusters were late with their progress reports. However, thanks to our coordinators, we had an understanding of this was due to a serious delay or simply due to the cluster not prioritising administrative obligations.

Issues encountered during implementation

Overall, the feedback received from clusters and experts was positive, with most of the projects running smoothly. For example, clusters mentioned that the selected experts were knowledgeable, dedicated and easy to work with. In addition, the practical, interactive, hands-on approach of the experts was appreciated, while the idea of having experts and the TGTF team work directly with SMEs through tailored advice was seen as beneficial by the clusters. Other clusters appreciated the cross-sectoral interaction facilitating the exchange of knowledge and best practices and the very smooth organisation. Finally, three clusters specifically mentioned that **the facility went well beyond their expectations and that these kinds of initiatives should be replicated in the future**.

Nevertheless, there were also some issues encountered during implementation, which we will discuss in the following paragraphs.

The primary challenge mentioned by clusters was the **time available for the implementation of activities.** Most clusters would have preferred a longer support facility, with one cluster suggesting a duration of one year. While in general, a longer duration can be beneficial as it allows for more time to implement, review and learn, it can also dilute activities as they are spread over a longer time span. In such cases, intermediate deliverables possibly linked to joint webinars with other participants to present results can address this issue. With four to five months, the TGTF would have still been long enough if there was not also the issue of timing and the need of implementing it just before the start of the summer holidays. During the summer months, a few clusters completely halted activities, while for most, it made the involvement of companies and other stakeholders extremely difficult. This led to some activities needing to be rushed or being implemented with fewer companies participating than hoped. It also put a lot of pressure on cluster managers and experts. Due to the aforementioned challenge of having to redesign the facility, this timing was, however, not avoidable.

Box 5.6 – Lesson learned #8: Duration of business advisory services

Ideally, business advisory services should last between 3 to 9 months. While 3 months is rather short, it can be sufficient time for targeted actions where the needs and activities are very clear to each involved party. For facilities such as the TGTF, where needs are less clear and individual training paths need to be first developed, longer durations are advisable, allowing the experts and the participants sufficient time to agree on activities. For advisory services longer than 5 months, intermediate milestones should be set in advance in order to ensure activities are not postponed too late in the process. Longer holiday periods should be taken into account when planning advisory services by frontloading activities in advance of the holiday period and by making a holiday plan to understand which activities can continue during the holiday time.

The **overall goal was not just to increase cluster capacities but also to directly support SMEs** by involving them in activities. This led to many of the implemented activities (see Chapter 2 and 3) involving SMEs and other cluster members. In particular, surveys were used for clusters to better

understand their members' needs, as well as joint workshops and also 1-on-1 trainings that directly addressed some of these needs. However, clusters reported that it was difficult to get SMEs to respond to questionnaires, and in many cases, direct contact was needed to get responses. This issue also applied to workshops with SMEs. Linked to this issue is also the reported high fragmentation of SMEs needs among some clusters, which makes it difficult to organise activities that benefit all cluster members. **In some cases, a more targeted approach (e.g. through 1-on-1 trainings) was very successful, which meant, however, also that the total number of involved SMEs was reduced.** With more time, it will be key to ensure a step-by-step process of engagement and ownership by the SMEs. In addition, it is also useful to allow for SMEs more time to respond to a survey or an earlier advance warning to save the date for a workshop can be helpful.

Box 5.7 – Lesson learned #9: Importance of providing targeted support to SMEs

SMEs often struggle in implementing changes in their business models (i.e. in regard to the green transition). This is due to limited resources (both in terms of capital and labour) and linked to that also limited knowledge and awareness. Therefore, it is **key to provide both targeted support to SMEs as well as have local or regional supporting frameworks such as clusters** that can provide a support structure and facilitate growth and transformation. We, therefore, aimed the support provided first at the clusters as the support structure, but secondly also directly at SMEs through their clusters. However, when the target group includes companies and, in particular, SMEs, it is important to realise that activities might require more time as companies are in general busy with their day-to-day operations. Activities also need to be closely scrutinised in their added value to companies, and this added value needs to be explained clearly in order to give companies a clear incentive to participate. Finally, activities should be planned well in advance and timed so that companies are not overburdened with too many requests at the same time. For example, if a workshop is to be organised based on a needs assessment survey, then this should be clear to the company already when filling in the survey, potentially already announcing the date in the survey or giving the company options to choose a particular date.

It was a pleasure to see so many clusters rising to the challenge of the green transition and spending significant time with their experts and our coordinators on discussing and implementing activities. This significant amount of time meant, however, that implementation was in some cases also complicated by the **capacity of clusters** themselves. This was due to various reasons. In some cases, the clusters only had a small team or just one person managing activities. In one case, this was also complicated by cluster employees having left the cluster team just before the activities started. In these cases, activities focused more on helping the cluster in developing their own capacities. In other cases, the issue was less one of capacity, but one of alignment as a few of the projects were not individual clusters but consortia of several clusters. While such consortia can be beneficial to create synergies, they require more time to understand needs and agree on activities. Additionally, they require also to make a decision on what areas to focus on as the clusters might face different challenges. We noted that especially TGTF projects with more than two clusters encountered delays as it simply took more time to get back to the expert and the TGTF coordinator.

Box 5.8 – Lesson learned #10: Taking into account the heterogeneity of the participants in the design of the advisory services

Clusters are heterogeneous and have different needs depending on their own development and that of their members. In our case, it would have been beneficial to better differentiate between clusters that are more advanced and can have support activities targeted at their members and clusters with more basic needs and that demand support in their own capacity building. In addition, it is critical to ensure that clusters' project managers provide backup contacts and a team to ensure continuity and efficiency. It is also advisable to limit the consortia of clusters to a maximum of two clusters. This would have limited the time needed to align and organise activities. Alternatively, one could request consortia to agree in advance on activities as well as nominate one clear leader (with a back-up) who would coordinate between the different members allowing expert and TGTF coordinator to focus on project implementation.

In general, while the implementation of activities went mostly smoothly, there were some challenges caused by the **general effort required by clusters and experts** in implementing activities. In some cases, the clusters' value chains were very heterogeneous with various different strategies and business models, which complicated the work of experts in familiarising themselves with needs and challenges. The large amount of information that needs to be collected in a short amount of time naturally led to some delays. Similarly, clusters struggled with implementing activities on their end and, in particular, providing information on short notice to their experts as well as in mobilising members or other stakeholders. Overall, such complexities regularly challenge advisory projects. These issues are difficult to address and mainly require either additional time or capacity.

Finally, some of the other issues reported by clusters and experts were difficulties in **identifying speakers for workshops and engaging other stakeholders outside of the cluster** (e.g. investors, public authorities). This also led to additional efforts by clusters, as both the expert and TGTF team often did not have the local contacts needed. Linked to this were also **language barriers**. When selecting experts, content expertise was considered a higher priority than language knowledge; therefore, experts were not always fluent in the native language of the cluster. Activities with the cluster team could be implemented in English. However, this was not the case for all activities targeted at companies. In some cases, this put additional efforts on the cluster to translate documents, and for a few workshops, interpretation services were organised by the TGTF team.

5.4 Exit Strategy: closure of the facility and ensuring a lasting impact

Starting at the conception of an advisory facility, it is important to consider the exit strategy and how one can create a lasting impact. The three cross-cutting synergy webinars (Chapter 4) provided a good vehicle to prepare for beyond the TGTF. Knowing that some clusters were already finalising activities in late September and early October, while others required more time, we used the webinars

to allow for room to exchange between clusters on activities and successes, thereby providing other clusters with inspiration for future activities. In addition, at the first synergy webinar (24 September), we introduced a road mapping exercise, asking clusters to complete their own green transition roadmap by filling in a simple template (see Annex I). In this roadmap, clusters could outline their current status (incl. strengths and challenges) and set their future ambitions, as well as identify specific actions to achieve these ambitions. The **roadmap** allowed clusters themselves to choose their level of ambition, and it encouraged them to think about the next steps and how they want to build on the lessons learned during the facility. At the final webinar (5 November), a few clusters had the ability to present their roadmaps to their peers and to the experts.

Box 5.9 – Lesson learned #11: Planning from the start to create impact beyond the facility

A challenge with any advisory or coaching service is always to create a lasting impact beyond the training period. Specifically, with organisations, there is the risk that the people that participated in activities leave their organisation, and thereby lessons learned are lost for that organisation. In our case, we, therefore, asked TGTF coordinators and experts to **produce written outputs** (e.g. workshop and training reports, guidance documents, strategy documents, overviews of lessons learned and best practices collected during the facility). In addition, we instructed them also to **include SMEs and other stakeholders** in activities where possible in order to ensure that knowledge is disseminated. Finally, as described, we asked clusters to think about their future by filling in a simple **road map** and reflecting on the lessons learned and what next steps they would like to take. Such simple activities encourage participants in advisory facilities to take some time to reflect and plan ahead. For an even greater effect, one could have already announced this exercise at the outset of the facility.

Besides the more content-focused tasks of developing roadmaps and organising the final webinar, closing the facility also meant various administrative tasks. These included collecting missing progress reports and outputs as well as requesting feedback from clusters and experts. These tasks can be quite time consuming but help with the wrap-up and reporting on an advisory service. However, while doing so, one should also take the time to **celebrate the achievements**. Therefore, simultaneously with these administrative tasks, certificates of completion were prepared for the participating clusters (see Annex I). These were signed by the TGTF team and the experts and then handed over to the clusters in order to give them something tangible to celebrate their efforts and learnings.

Box 5.10 – Lesson learned #12: Celebrating achievements

After an intense period with many activities, one should not forget to stop at one point and look back to celebrate what has been achieved. For the TGTF, we did this by

- By inviting participants to share their success stories and key learnings during the final webinar;

- By asking cluster coordinators to draft short success stories, which can be found throughout this report
- And finally, through the completion certificate for clusters.

Annexes

Supporting annexes to this report

EUROPEAN CLUSTER COLLABORATION PLATFORM

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Annex I – Templates from the TGTF

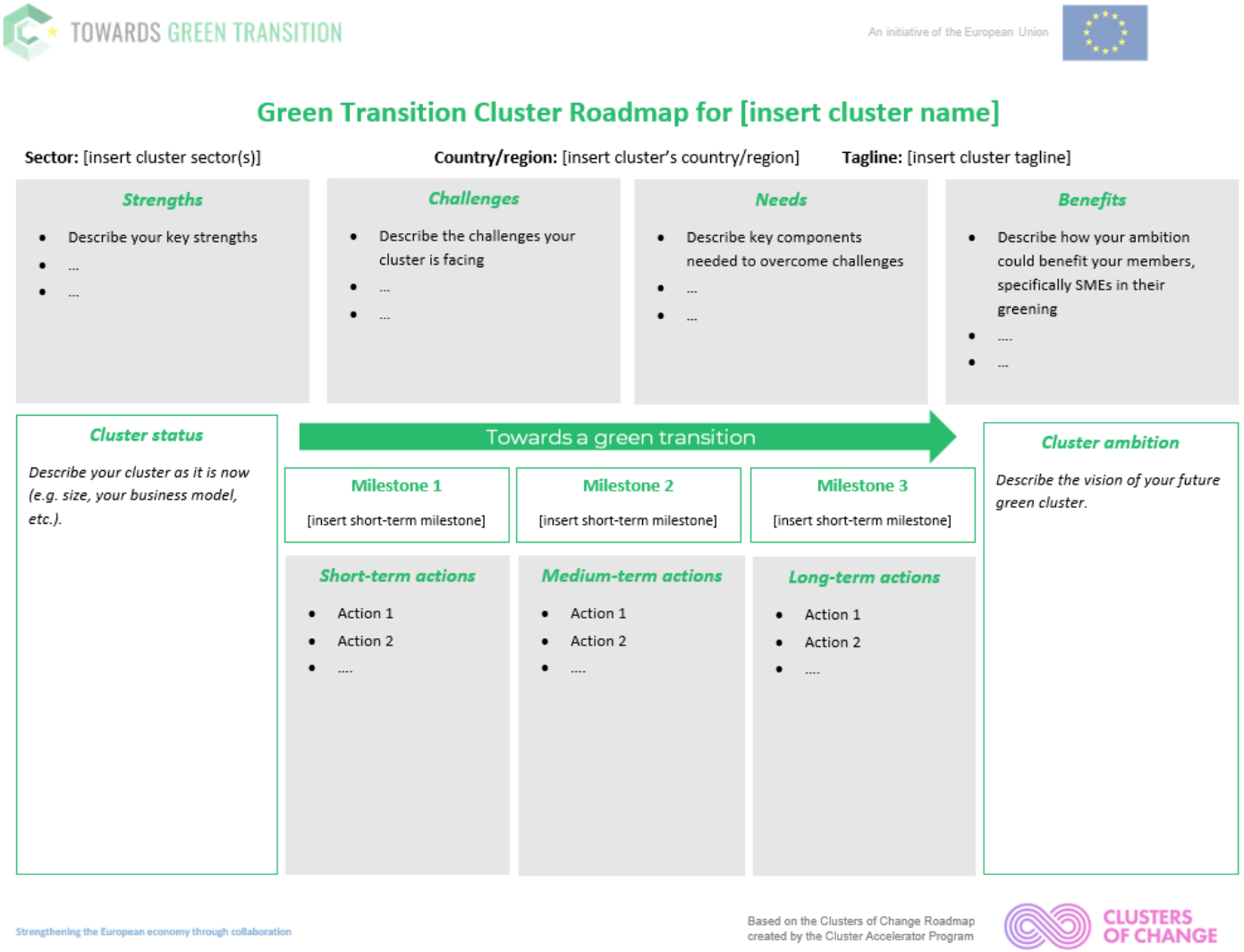
Monitoring template

TOWARDS GREEN TRANSITION

To be filled in by both Business Advisor and Cluster								
Target set at kick-off meeting	Actions set at kick-off meeting	Indicative deadline set at kick-off meeting	Target actions met?	Deadline met?	Outputs	Description	Challenges faced	Project Coordinator Comments
1.								
2.								
3.								
4.								
5.								

Other comments (e.g. lessons learned, ideas for knowledge exchange, additional needs, feedback provision)

Roadmap template



TOWARDS GREEN TRANSITION

An initiative of the European Union

Green Transition Cluster Roadmap for [insert cluster name]

Sector: [insert cluster sector(s)] **Country/region:** [insert cluster's country/region] **Tagline:** [insert cluster tagline]

Strengths

- Describe your key strengths
- ...
- ...

Challenges

- Describe the challenges your cluster is facing
- ...
- ...

Needs

- Describe key components needed to overcome challenges
- ...
- ...

Benefits

- Describe how your ambition could benefit your members, specifically SMEs in their greening
- ....
- ...

Cluster status

Describe your cluster as it is now (e.g. size, your business model, etc.).

Towards a green transition

Milestone 1

[insert short-term milestone]

Milestone 2

[insert short-term milestone]

Milestone 3

[insert short-term milestone]

Short-term actions

- Action 1
- Action 2
- ....

Medium-term actions

- Action 1
- Action 2
- ....

Long-term actions

- Action 1
- Action 2
- ....

Cluster ambition

Describe the vision of your future green cluster.

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Based on the Clusters of Change Roadmap created by the Cluster Accelerator Program

CLUSTERS OF CHANGE

Certificate of completion template

TOWARDS GREEN TRANSITION

An initiative of the European Union

Certificate of completion

This is to certify that the

[Cluster name] cluster

Has participated to the activities run with the contribution of the business advisor [Expert Name] and offered in the context of the Towards Green Transition Facility (TGTF) of the European Cluster Collaboration Platform (ECCP) between June and November 2021.

ECCP Management

[ECCP management name]

Work Package Leader and TGTF Project Manager

[Signature]

TGTF Business Advisor

[Expert name]

[Signature]

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November 2021

Annex II – Agendas of Webinars

i) Agenda Webinar one: Enhancing sustainable business models & exploiting relevant knowledge developed during the TGTF

Timing	Agenda points
9.15-9:30	Dial in of participants
9:30-9:15	Welcome to the webinar & overview of the TGTF progress Introduction by Peter Czaga (Cluster Policy, DG GROW D2, European Commission) Welcome and overview of TFTG progress Tahmina Shafique (ECCP)
9:45-10:20	How clusters can develop sustainable business models. Key tips and hints. Presentation by Bianca Dragomir (AVAESEN/Clusters of Change) Q&A with participants
10.20 – 10.25	Coffee Break
10.25-10.45	Explore & exploit: Sustainability needs assessments & sector analysis done so far Presentation by Bianca Dragomir (AVAESEN/Clusters of Change) & Pouyan Maleki (ECCP)
10.45-11.10	How we build forward on the lessons learnt and opportunities from the TGTF. Presentation by Pouyan Maleki-Dizaji (ECCP) & Bianca Dragomir (AVAESEN/Clusters of Change)
11.10-11.20	New opportunities: expressions of interest to access new training and inspiration for clusters TGTF Team
11:20-11:30	Wrap up: conclusions and next steps in your TGTF journey. Concluding remarks by moderator Bianca Dragomir (AVAESEN)

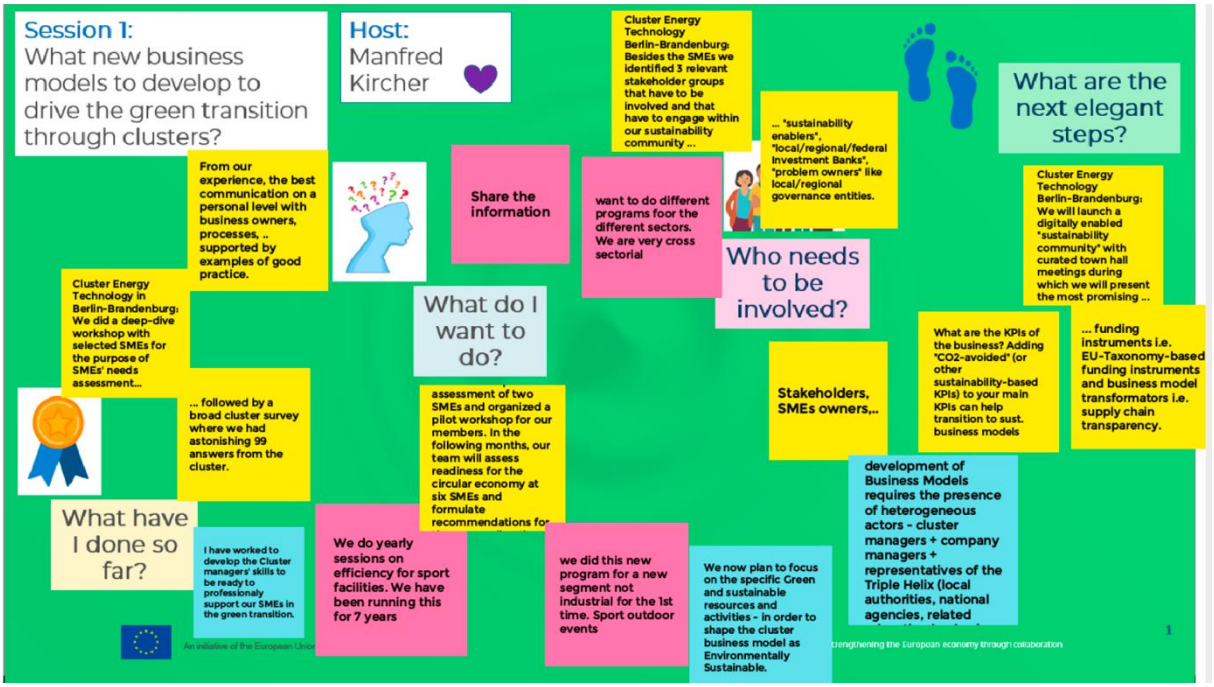
ii) Agenda Webinar Two: Enhancing Sustainable Business Models & Exploiting Relevant Knowledge Developed in TGTF

Timing	Agenda points
9:15-9:30	Dial in of participants
9:30-9:45	Welcome to the webinar & overview of TGTF progress Introduction by Spyridoula Vasakou (EISMEA) Welcome by Tahmina Shafique (ECCP) Overview of participatory leadership by Bianca Dragomir (AVAESEN/Clusters of Change)
9:45 - 10:40	Showcasing cluster stories on greening their SMEs in the context of TGTF 10 selected clusters pitch their stories. Moderated by Pouyan Maleki-Dizaji (ECCP) Q&A with participants
10.40 – 10.45	Coffee Break
10.45-10:50	Harvesting cluster intelligence and synergies on current TGTF outputs. Explanation of the break-out sessions by Bianca Dragomir (AVAESEN/Clusters of Change)
10.50-11:25	5 breakout sessions to expand the co-learning Interactive work sessions based on Participatory Leadership.
11:25-11:50	Inspiration and key insights from the breakout sessions. Rapporteurs provide a summary of the points discussed. Chaired by Bianca Dragomir (AVAESEN/Clusters of Change)
11:50-12:00	Conclusions and wrap up. Concluding remarks by moderator Bianca Dragomir (AVAESEN/Clusters of Change)

iii) Agenda Webinar Three: Clusters & greening beyond the TGTF

Timing	Agenda points
9:30 - 9:45	Dial in of participants
9:45 - 10:00	Welcome to the webinar & overview of TGTF progress Introduction by Spyridoula Vasakou (EISMEA) Welcome by Tahmina Shafique (ECCP) Brief recap on Roadmaps by Bianca Dragomir (AVAESEN/Clusters of Change)
10:00 - 10:25	Keynote: How clusters can tap into private and public finance for greening activities Presentation by Paulina Janiak (TGTF Expert) Q&A with participants
10:25 – 10.45	Success stories and reflections of achievements of the TGTF Presentation and moderation by Pouyan Maleki-Dizaji (ECCP) Interactive session involving all cluster managers
10.45-10:50	Coffee Break
10:50 - 11:50	Beyond TGTF: Developing & showcasing transformational roadmaps Presentation and moderation by Bianca Dragomir (AVAESEN/Clusters of Change) Selected cluster showcase their completed roadmaps Q&A with participants
11:50-12:00	Conclusion and end of webinar/TGTF Concluding remarks by moderator Bianca Dragomir (AVAESEN/Clusters of Change) & Tahmina Shafique (ECCP)

Annex III – Webinar 2: JamBoards of breakout sessions




Session 3:
How can we create a larger impact through effective communication?
Host: Nestor Coronado Palma
KPI: No. SMEs involves in CE implementation
How do you measure if the communication is effective? What KPIs work?
involving media/press
What are the next elegant steps?
Find the right target group
Relevant topics to the audience
What is the most compelling/impactful action you took in communications during the TGTF?
What KPIs work?
Cluster-local media is a match made in heaven
Careful planning to attract audience attention!
In order to achieve a wider range of communication, it is necessary to share experience, share knowledge, highlight their successes / failures.
Who needs to be involved?
In order to achieve a wider range of communication, it is necessary to share experience, share knowledge, highlight their successes / failures,
Select meaningful messages
What do I want to do?
all levels of dissemination
By using different communication channels in a coordinated manner.
Right tool for the target group
To create new best practices in green transition to guide other SMEs.
Constant sharing of information through a personal approach.
Press releases - regional level
How closely you (your cluster) work with the media?
Working group inviting cluster members to share their experience (in a safe space)
What have I done so far?
Tailored content
measure!!
Our cluster doesn't have specific budget for media campaigns but, in the context of specific regional/EU projects we communicate the results joined
We are in regular contact with the regional newspaper, send them press releases
We communicate with the media on the basis of our activities, events, achievements that we want to highlight. Otherwise, relations with the media could be more systematic.
How closely you (your cluster) work with the media?
I think that we must think about the important role of the clusters that can give max relevance to the SMEs experiences.
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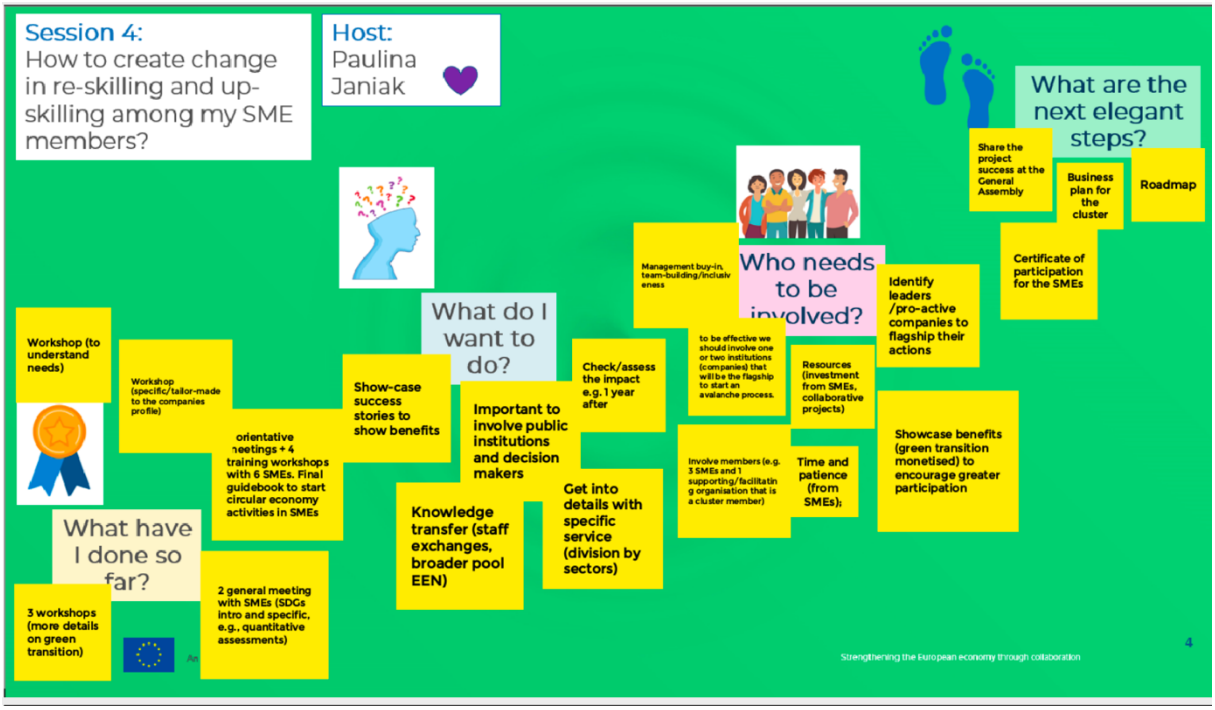
Session 4:
How to create change in re-skilling and up-skilling among my SME members?
Host: Paulina Janiak
What are the next elegant steps?
Share the project success at the General Assembly
Business plan for the cluster
Roadmap
Certificate of participation for the SMEs
Management buy-in, team-building/inclusiveness
Who needs to be involved?
Identify leaders /pro-active companies to flagship their actions
Workshop (to understand needs)
What do I want to do?
to be effective we should involve one or two institutions (companies) that will be the flagship to start an avalanche process.
Resources (investment from SMEs, collaborative projects)
Workshop (specific/tailor-made to the companies profile)
Show-case success stories to show benefits
Check/assess the impact e.g. 1 year after
Important to involve public institutions and decision makers
Showcase benefits (green transition monetised) to encourage greater participation
orientative meetings + 4 training workshops with 6 SMEs. Final guidebook to start circular economy activities in SMEs
Involve members (e.g. 3 SMEs and 1 supporting/facilitating organisation that is a cluster member)
Time and patience (from SMEs);
Get into details with specific service (division by sectors)
Knowledge transfer (staff exchanges, broader pool EEN)
What have I done so far?
2 general meeting with SMEs (SDGs intro and specific, e.g., quantitative assessments)
3 workshops (more details on green transition)
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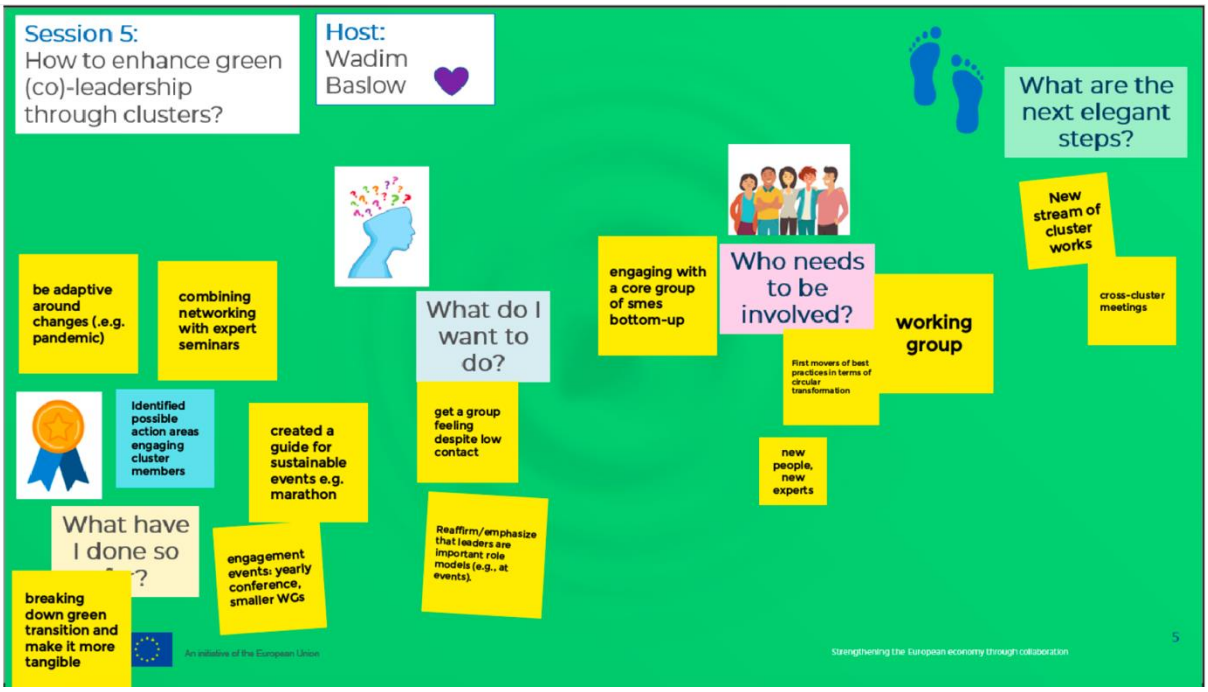
Session 5:
How to enhance green (co)-leadership through clusters?
Host:
Wadim Baslow
What are the next elegant steps?
New stream of cluster works
cross-cluster meetings
be adaptive around changes (.e.g. pandemic)
combining networking with expert seminars
What do I want to do?
engaging with a core group of smes bottom-up
Who needs to be involved?
working group
First movers of best practices in terms of circular transformation
new people, new experts
get a group feeling despite low contact
Identified possible action areas engaging cluster members
created a guide for sustainable events e.g. marathon
What have I done so
engagement events: yearly conference, smaller WGs
Reaffirm/emphasize that leaders are important role models (e.g., at events).
breaking down green transition and make it more tangible
An initiative of the European Union
Strengthening the European economy through collaboration
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