

PROJECT

POLREC



D3.5– Findings about knowledge/services/interests/objectives of the companies





Document status			
Version	Date	Author	Description
V1.0	01/27/2023	Daniela Adelhelm (WFG)	Draft
V2.0	01/31/2023	Dorte Walzl Bælum (PCD)	Draft
V3.0	02/01/2023	Roxane Girard (POL)	Draft
V4.0	02/02/2023	Daniela Adelhelm (WFG)	Final Version
Reviewed	<input checked="" type="checkbox"/>	YES	
	<input type="checkbox"/>	NO	
Dissemination Level	<input checked="" type="checkbox"/>	PU – Public (fully open)	
	<input type="checkbox"/>	SEN – Sensitive (limited under the conditions of the Grant Agreement)	
	<input type="checkbox"/>	CO – Confidential (EU classified under decision)	

Cite As:

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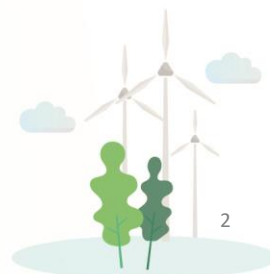


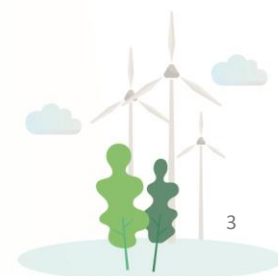


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1. POLREC Consortium Partners

Table 1 – List of partners

POL (FR)	Polymeris POLREC Lead Partner
CEN (PT)	Centro Tecnológico da Indústria de Moldes, Ferramentas Especiais e Plásticos POLREC Partner
MAV (ES)	Clúster de Materials Avançats de Catalunya POLREC Partner
PDC (DK)	Plast Center Danmark POLREC Partner
WFG (DE)	Wirtschaftsförderung Raum Heilbronn GmbH POLREC Partner

2. Introduction

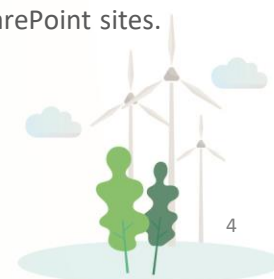
This document has been written for the Deliverable 3.5 POLREC project Supporting a green and resilient Europe through POLYmer RECYcling funded by the European Commission Joint Cluster initiatives for Europe's recovery (Euroclusters) under the Single Market Programme (SMP COSME) grant agreement number 101074434.

This report serves as a basis on the findings about the knowledge, services, products and especially the interests and objectives of the identified SME members and the materials that could be exchanged between value chains, within and across sectors.

In the POLREC project, various and numerous industrial sectors are concerned and targeted: Transport and Mobility, Construction, Renewable energy, Digital and Electronics, Health, Consumer, and Industrial & Food Packaging. Due to their high performance, polymers (thermoplastics, thermosets, elastomers, and rubbers) are mostly and particularly used in these different sectors. In the current situation of the search for energy efficiency, to face the problem of materials availability and to reduce European geostrategic and economic dependence, the development of polymers must be highly sustainable, and strive for full recyclability.

The consortium partners (see Table 1) have come together to explore how an intensified cluster and business network collaboration across borders and sectors can meet this challenge and exploit the international business opportunities related to the topic.

This document outlines the information technologies available for the POLREC project including Matchmaking Platform Information Technology (IT) Tool, and the POLREC MS Teams and SharePoint sites. POLREC website on the ECCP Platform is established but does not form part of this document.





3. General Overview

POLREC focuses on the cluster organisations comprised in its consortium and on their SME members.

The POLREC consortium members are already strengthening this kind of collaboration within their respective members and adjacent regions.

Further support and attention will be provided to ensure the value and depth of the SMEs business operations, help improve the commitment between the participants, and ensure that the objectives and activities are targeted and dedicated to the development of the Host Organisations (HOs) exchanges and events.

POLREC partners will actively help in the search process via internal emails/visio-conferences networking meetings and IT services including an online matchmaking tool.

The following areas have been identified from experience from previous projects:

1. Adaptability to each country: different countries, diverse cultures. The training market is not the same in each country so the IT services must consider these differences by adapting their results to each one.
2. The consortium partners should therefore highlight the services added value and their benefits to the potential users. it's necessary to emphasize the advantages of the project for the main target groups.
3. Clear identification of the target groups and related services to ensure that the IT services reach their intended audience.
4. Ease of communication between consortium partners and members to ensure a better understanding of which services to focus on, what works best and what could be improved.

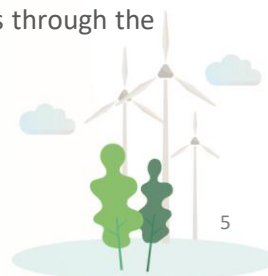
4. The POLREC Project

4.1. Objectives and Results

The objective of the POLREC project is to enhance the polymer industry's capacity to reduce the environmental impact of its products while increasing the European strategic autonomy in its supply of raw materials for polymer production.

To achieve those objectives, POLREC will help the industry to switch practices from polymer waste landfilling and burning towards polymer recycling (mechanical or chemical) into raw materials (monomer polymer and additives).

The consortium partners will support SMEs in the appropriation of polymer recycling methods through the implementation.





D3.5 – Findings

Clusters, by building on their network to facilitate the identification of common interests and the identification of recycling technologies and recyclers can facilitate this process.

The POLREC project will build a pan-European cross-sectoral network of SMEs (Eurocluster) whose main activities will be to support SMEs in the following:

- ✓ Help SMEs in finding viable economic models that could foster the adoption of polymer recycling,
- ✓ Establishing a partnership to exchange polymer material through recycling,
- ✓ Accessing innovations in mechanical and chemical recycling,
- ✓ Accessing digital innovations for recycled material quality monitoring and tracking
- ✓ Finding innovative and viable business models based on recycled polymers,
- ✓ Identify the best practices,
- ✓ Analyse information to identify the waste fractions that could be recycled to lead to material exchange within and across value chains.

POLREC partners will coordinate networking and matchmaking activities throughout the project's lifetime and beyond.

5. Online Survey

5.1. Background of the Survey

The POLREC partner consortium aims to support SMEs in the adoption of polymer recycling methods through the implementation of the following actions:

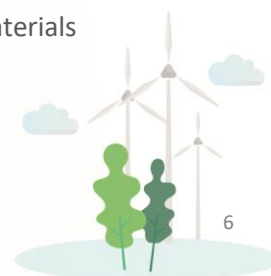
- Establishing a pan-European network of SMEs involved in polymer recycling and promoting value chain linkages between SMEs willing to recycle their plastic waste and SMEs willing to source recycled material and produce raw materials from recycled polymers.
- Promote innovative solutions for mechanical and chemical recycling of plastic waste and digital monitoring of recycling processes.
- Encourage the adoption of innovative and viable business models by SMEs that promote the use of recycled materials.
- Train the workforce in polymer recycling technologies and digital solutions for quality monitoring and traceability of recycled material.

In order to achieve these goals, different work packages have been set up by the consortium. The basis for a goal-oriented work is first to query the needs and competences of the companies to be supported. For this reason, the online survey was created.

The survey is a component and basis for the further work in work packages 2 and 3.

Both work packages overlap into each other:

The aim of WP2 is to identify products and processes that enable increased recycling and to promote their introduction by SMEs. Furthermore, a better quality control and traceability of the polymer materials identified in cooperation with WP3 shall be achieved.





D3.5 – Findings

Components and objectives of WP3 are:

- a. Promote cluster to cluster collaboration (C2C).
- b. Promote SME to SME (B2B) collaboration.
- c. Identifying materials that are recycled and between value chains.

5.2. Design and Structure of the Survey

The survey was created using a platform called “Survey monkey”. This tool allows the creation of quite complex questions and referral logics within the questionnaire. Here, you can also define which number of answers per question is allowed (minimum or maximum number). All questions in this questionnaire have been defined the way, that at least one answer option must be given.

This mandatory option has in some cases led to "meaningless" answers being submitted.

The survey itself consists of a total of 28 questions. The addressees of the survey are, on the one hand, plastics processing companies (with a focus on SMEs) and, on the other hand, recyclers.

The survey was deliberately designed to be as broad as possible so that companies would not be sent multiple surveys. The aim was to obtain as much of the information we needed from the companies as possible in one survey.

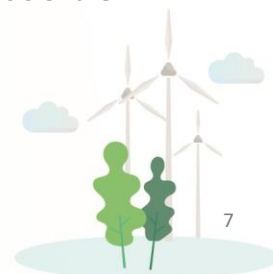
The survey is therefore basically divided into 2 sections. The first 4 questions are used to collect general data like company size, country of origin, company name, type of industry. After that question, the survey splits into 2 strands: "Plastics processing industry" and "Recycler".

This second strand (starting with question 5) contains more POLREC specific questions. Here, a distinguishment is made between companies that already use recycled materials in their production and those that do not and recycler.

For the companies that selected "plastic processing industry", the survey continues with question 5. Up to question 13, all companies remain in the same strand. After answering question 13, the survey splits up again for the companies. Here, a distinction is made between "Present user of recycled material" (question 14 to 16) and "no recycling activities" (question 17 and 18). For those who answered question 4 with "recycler", questions 5 to 19 are hidden. They are forwarded directly to question 19 in the second strand.

The segmentation into the different questionnaire strands leads to the fact that some of the questions appear twice. This duplication is only visible to the evaluators, not to the respondents. Therefore, some of the questions appear more than once in the evaluation.

Even though this is an international project, some company managers find it difficult to fully grasp the subject-specific content in English. For this reason, the project consortium decided to translate the questions into the respective national language and to create one questionnaire per country. Thus, in addition to the English questionnaire, surveys were also created in Danish, French, German, Spanish, and Portuguese. The answers from the respective questionnaires were now combined for the analysis of the data and are presented cumulatively below.





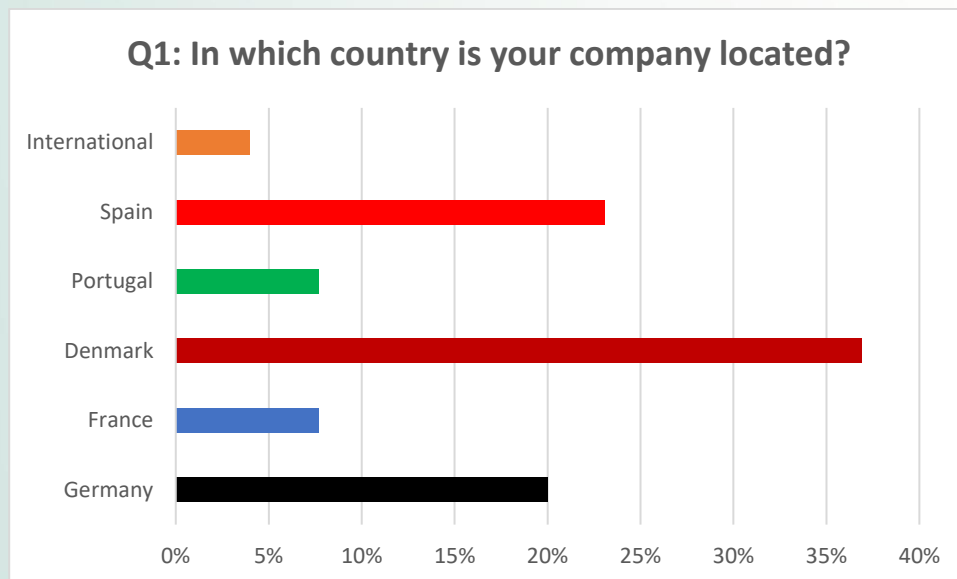
D3.5 – Findings

Approximately 750 companies were contacted to answer the questionnaires from cluster side. A total of 77 companies participated in the survey (Date: 27.01.2023).

This makes a response rate of 10,3%.

Since we know the names of the responding companies, we will contact other companies that have not yet responded to the questionnaire in advance of the planning for the online workshop. In this way, we are quite confident to have a sufficient number of companies that are interested in the further measures in the project and would like to participate further in it.

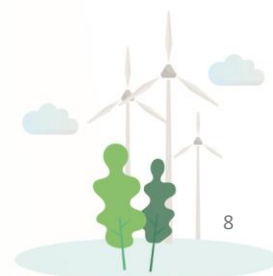
5.3. Results

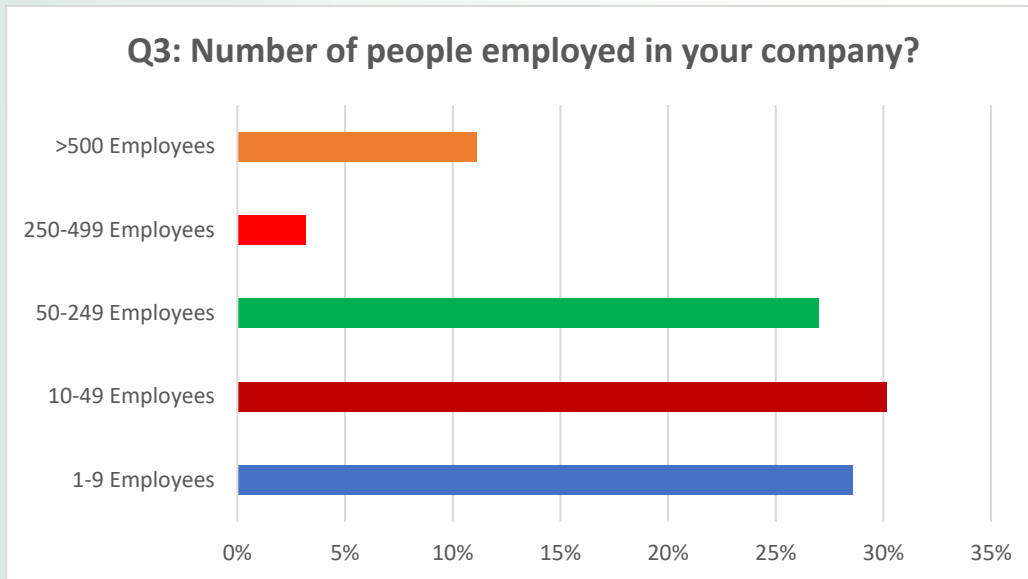


As described in the introduction, the questionnaire has different strands. From question 1 up to and including question 4, all 77 companies are within the same questionnaire strand.

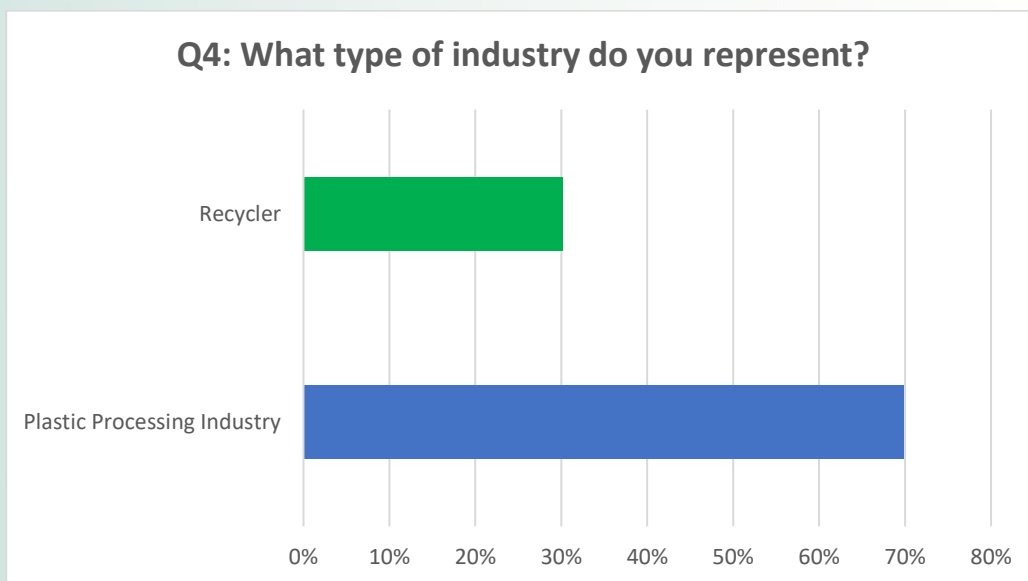
Question 1 (Q1) clearly shows that the participants are not evenly distributed across the different clusters, with Denmark and Spain making up the two biggest shares. 20% of the responses come from Germany.

The second question is deliberately left out within this report since it asks for the company name. Due to regulations of data security and anonymity, the question will not be analyzed in more detail. The listing of the company name is very useful for internal use, as it enables the respective clusters to get in contact with the companies. Be it for possible queries about information in the questionnaires or for further cooperation in the project. Thus, this report directly continues with the analysis of the third question.

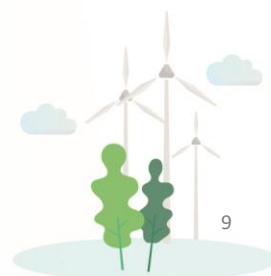


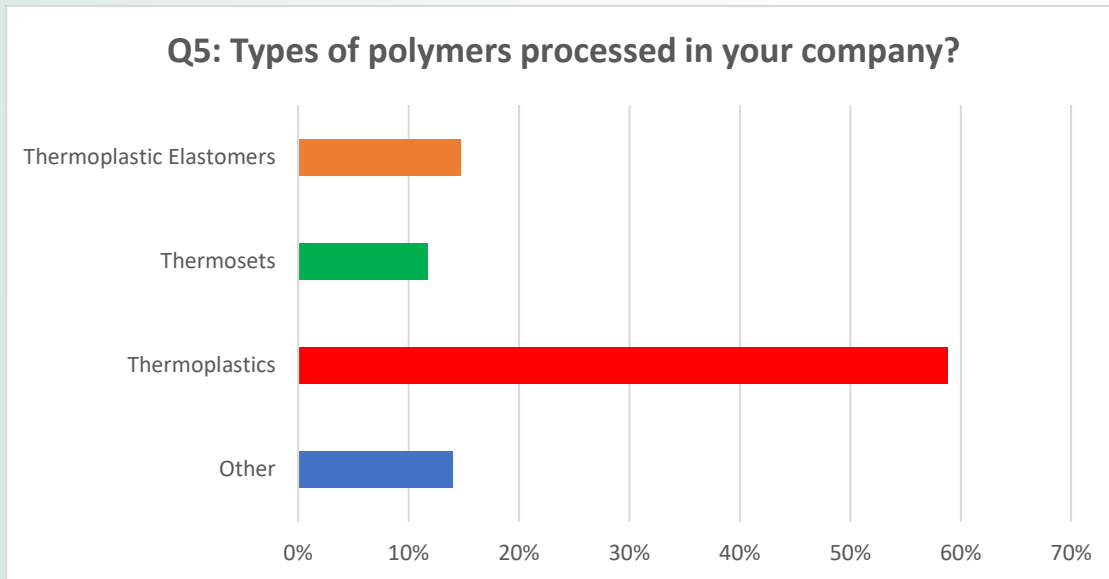


Q3 shows the distribution of companies according to their size. It is noticeable that the biggest share of companies has between 10-49 employees. The fact that only 14% of the responding companies are above the 250-employee limit is a positive distribution for the project. Since the subsequent financial support is limited to companies with less than 250 employees, it shows that we have reached the appropriate companies with the survey.



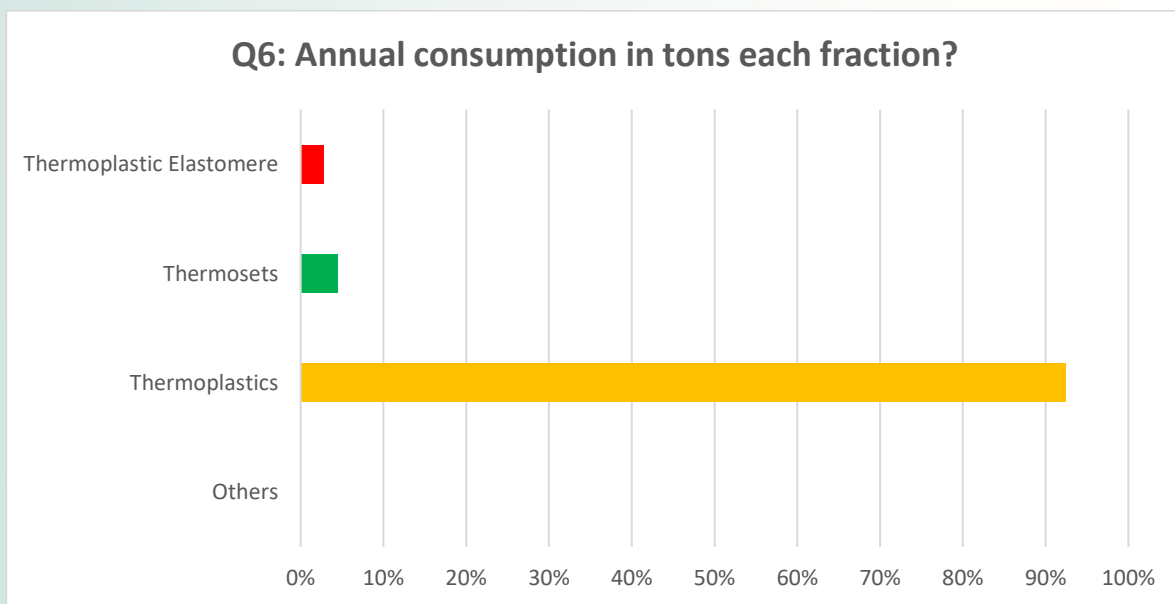
The fourth question asked the participants which type of industry their company represents. Hereby, the majority (70%) answered that their business belongs to the plastic processing industry.



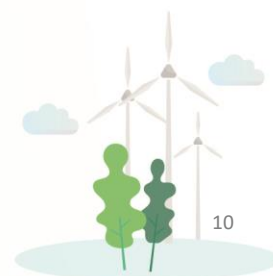


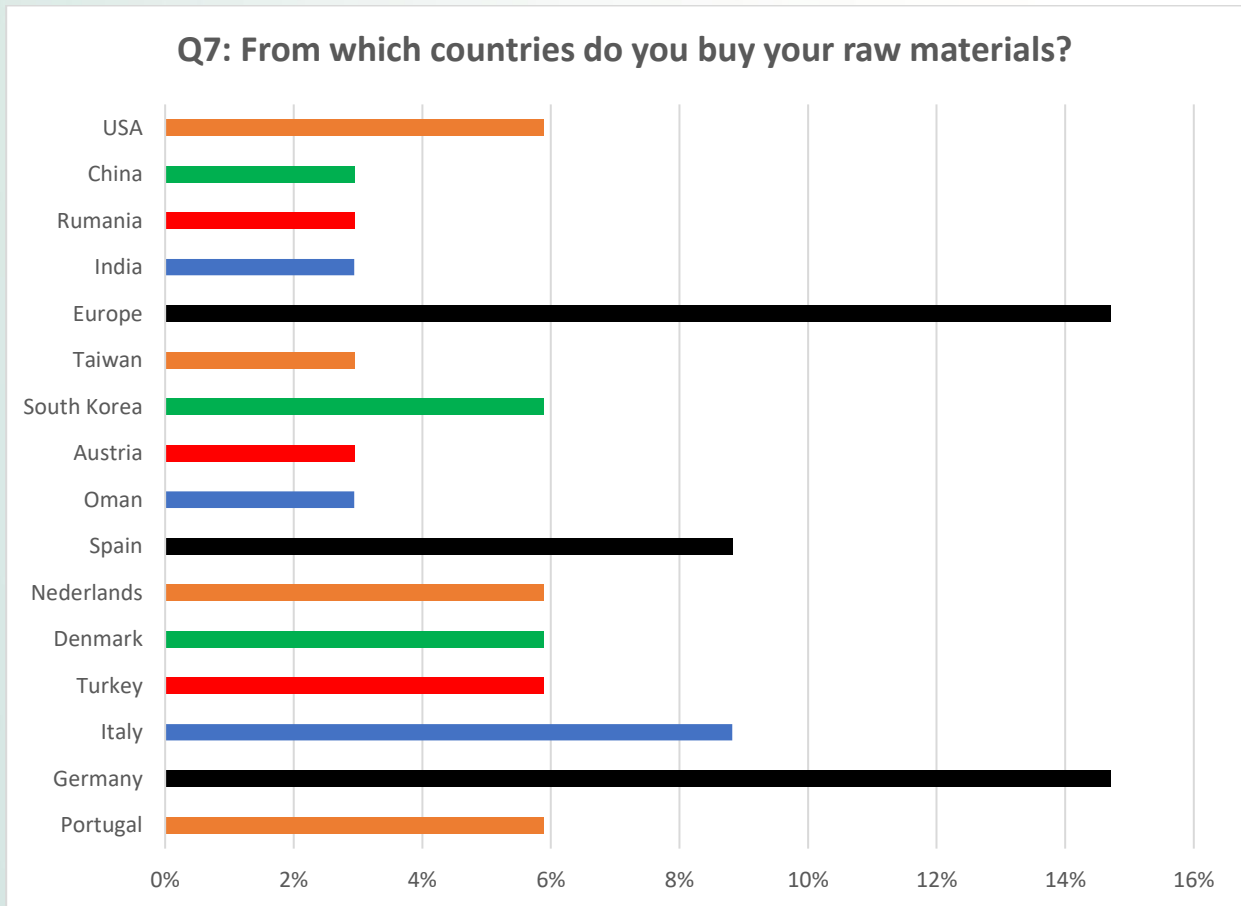
From here on, the survey splits and divides the companies into "plastic processing industry" and "recyclers".

From this question on, only the companies that indicated "plastic processing industry" are represented. Q5 is about the types of polymers, which are processed in the participants' companies. The results clearly show that Thermoplastics are the most frequent type of processed polymers with almost 60% of all answers.

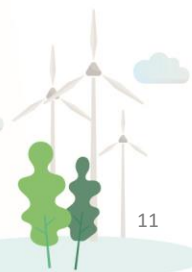
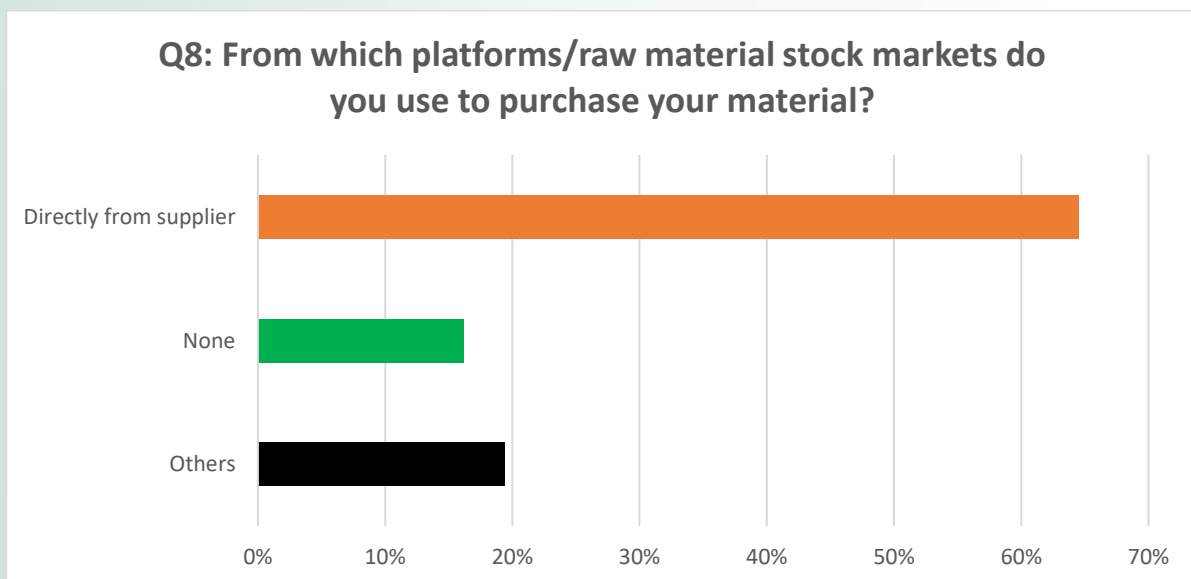


With Q6, the participating companies should give more detailed information about the annual consumption in tons of each fraction. Hereby, the total amount was 18.379 tons. As shown in the bar chart, Thermoplastics make up the biggest share with 16.999 tons, followed by Thermosets with 830 tons and Thermoplastic Elastomers with 520 tons per year.



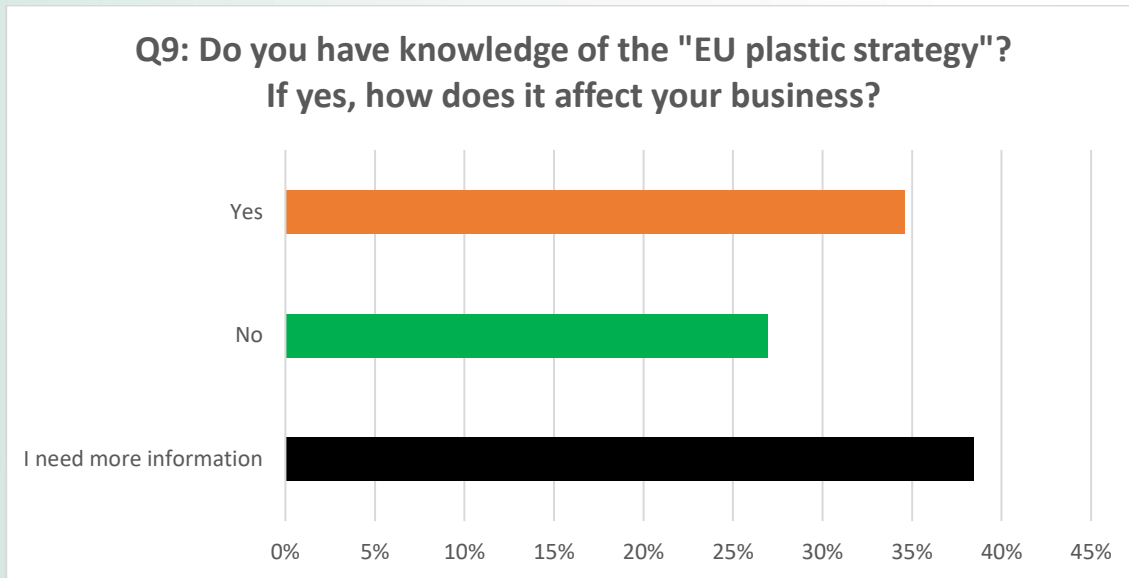


Q7 asked from which countries the participating companies usually buy their raw materials. The various number of different countries all across the globe clearly show that raw materials are purchased worldwide with Europe as a whole making up a major share (almost 15%) compared to the other countries. Within Europe itself, Germany is the leading country for purchasing raw materials with nearly 15%, followed by Italy with approximately 9%.

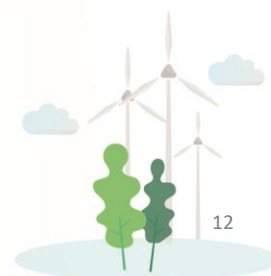


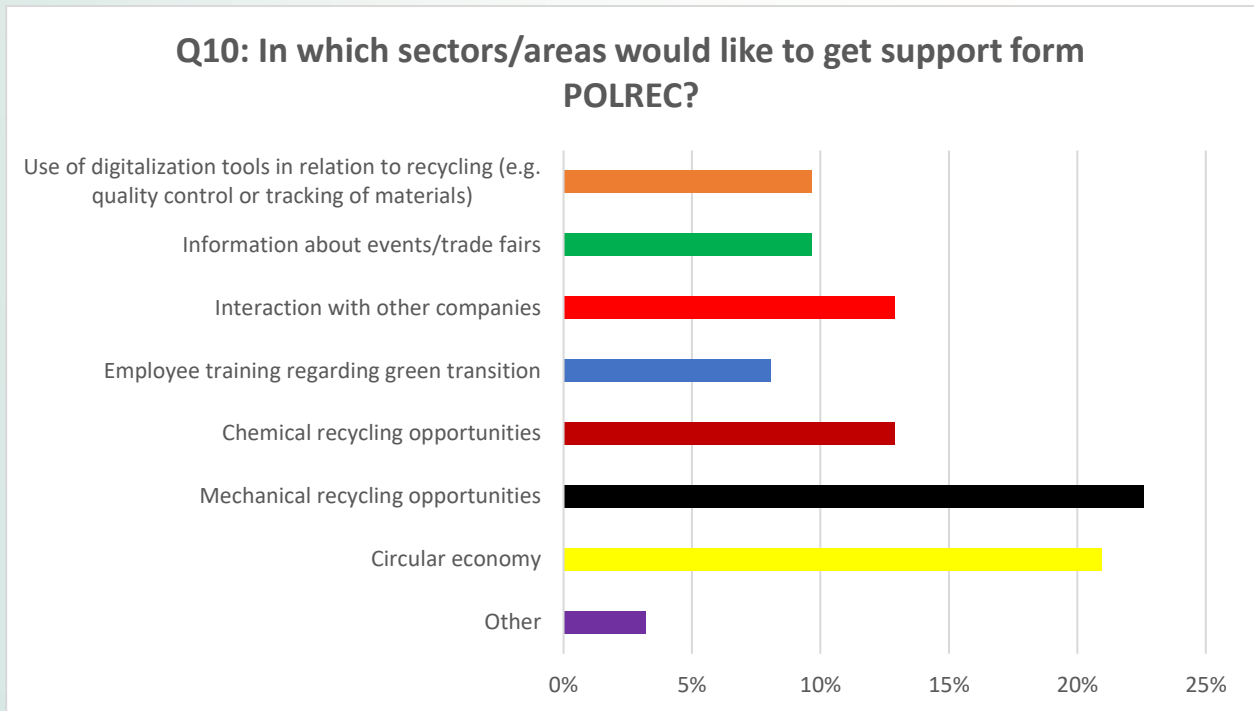


The next question, Q8, has the intention get more information about the platforms or raw material stock markets where the companies purchase their materials. The results display that most of the participants buy their materials directly from the supplier. This answer was submitted by more than 60% of all surveyed companies.

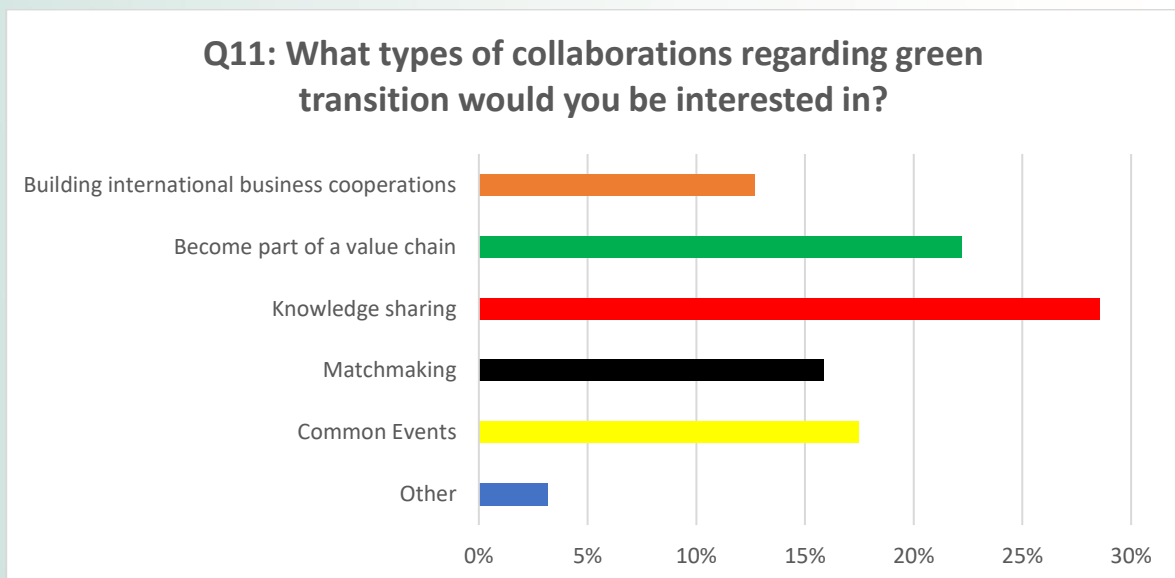


Q9 asks about the background knowledge of the “EU plastic strategy”. In general, this strategy has the objective to transform the way goods and products – which are made out of plastic – are produced, designed, used, and recycled within the European nations. Furthermore, this strategy represents a key element of Europe’s transition towards a circular and carbon neutral economy, which will also contribute to reach the 2030 Sustainable Development Goals, to fulfill the Paris Climate Agreement objectives and the industrial policy objectives of the European Union (Source: [Plastics strategy \(europa.eu\)](https://ec.europa.eu/euro-observatory/en/observatory/plastics-strategy)). According to the results, almost 35% of the respondents have knowledge about this strategy, whereas more than 25% do not. A major part of the companies stated that they need further information about the “EU plastic strategy” and have no deeper insight information about this topic. Concerning the second part of the question “If yes, how does it affect your business?” some of the companies mentioned that they focus on the development of products with materials which are easy to recycle. Besides that, they aim to reduce the usage of non-recyclable plastics, to develop new components for their customers in the automotive sectors which are easier to recycle, and to promote the taxation of plastic packaging.

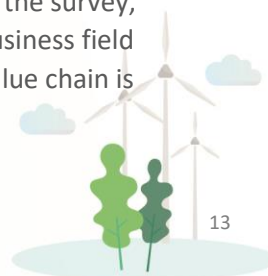




Q10 directly asks for sectors or areas in which the companies would like to get supported from POLREC. Hereby, the results show that most of the participants are interested in terms of mechanical recycling opportunities (approximately 23%), followed by circular economy related topics (approximately 21%) as well as chemical recycling opportunities and how to interact with other companies in familiar business field (both answer options have a similar share with 13%). In addition to that, some companies also added that further support by POLREC could be done in the toxicological risk assessment of substances in recycled materials.

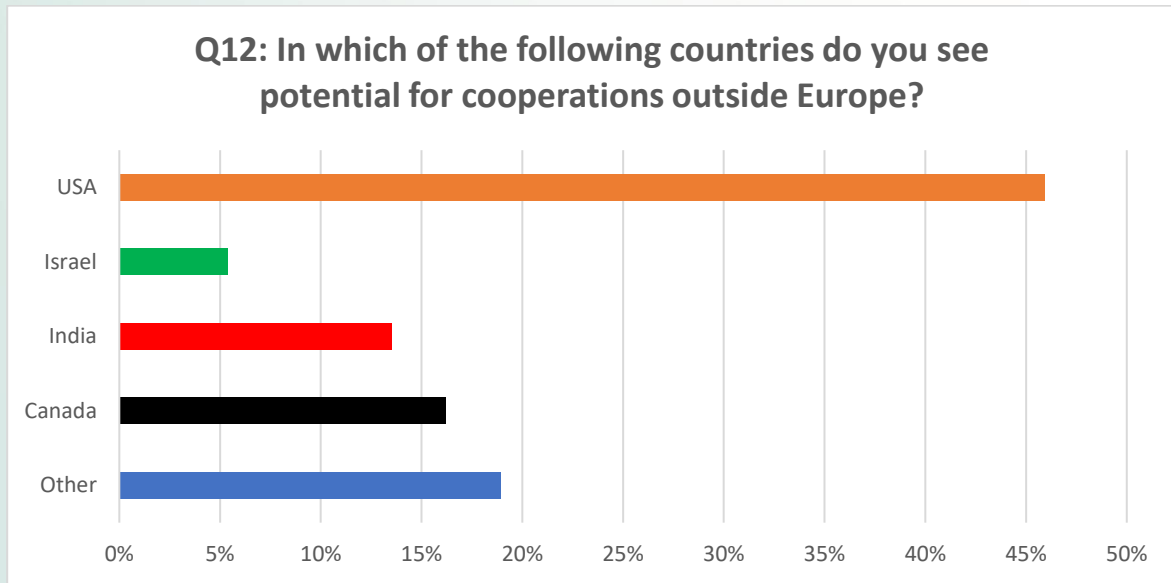


To get deeper insights into the field of business collaborations focusing on a sustainable transition, Q11 asked about the areas which are of special interest for the participants. Based on the results of the survey, the main area of interest is to share knowledge with other companies operating in the same business field aiming for similar objectives, i.e. striving for a green transition. Secondly, becoming part of a value chain is



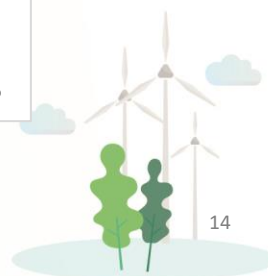
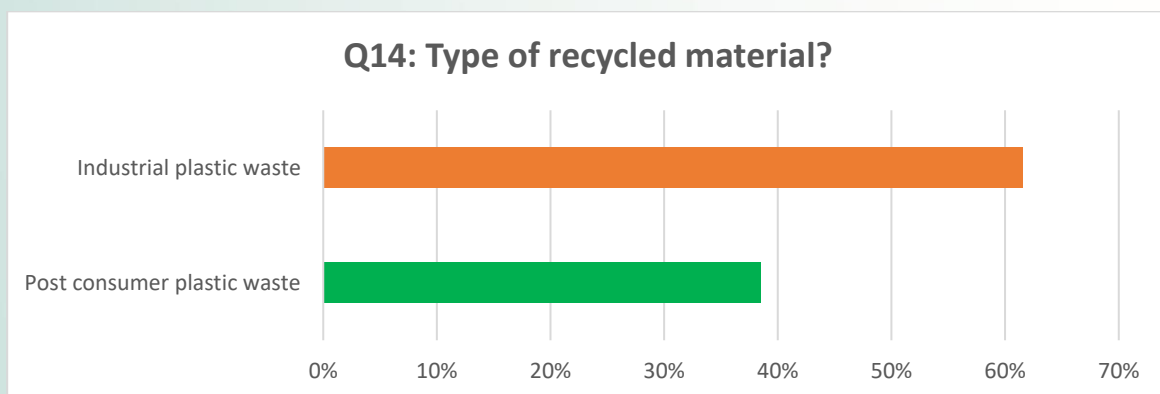
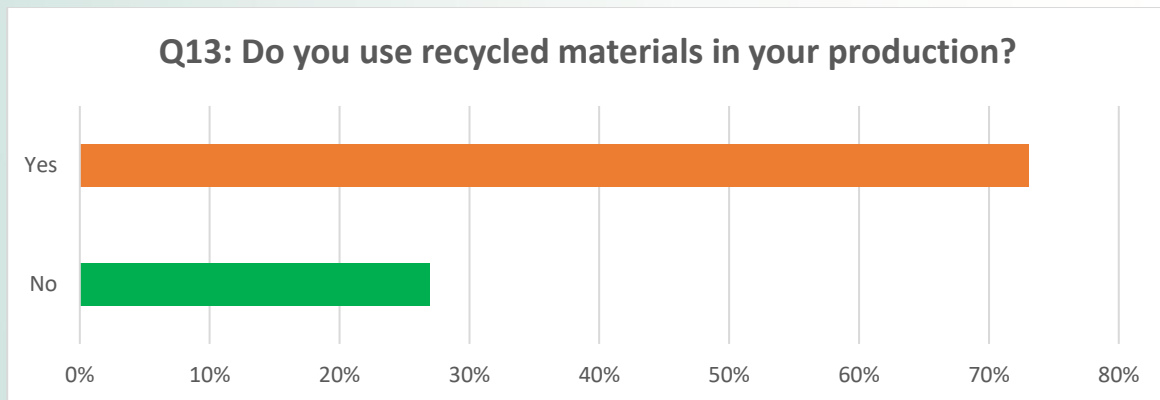


also favoured by the companies with a share of 23%. In the next place, common events and match making events are also of interest with 17% and 16%, respectively.



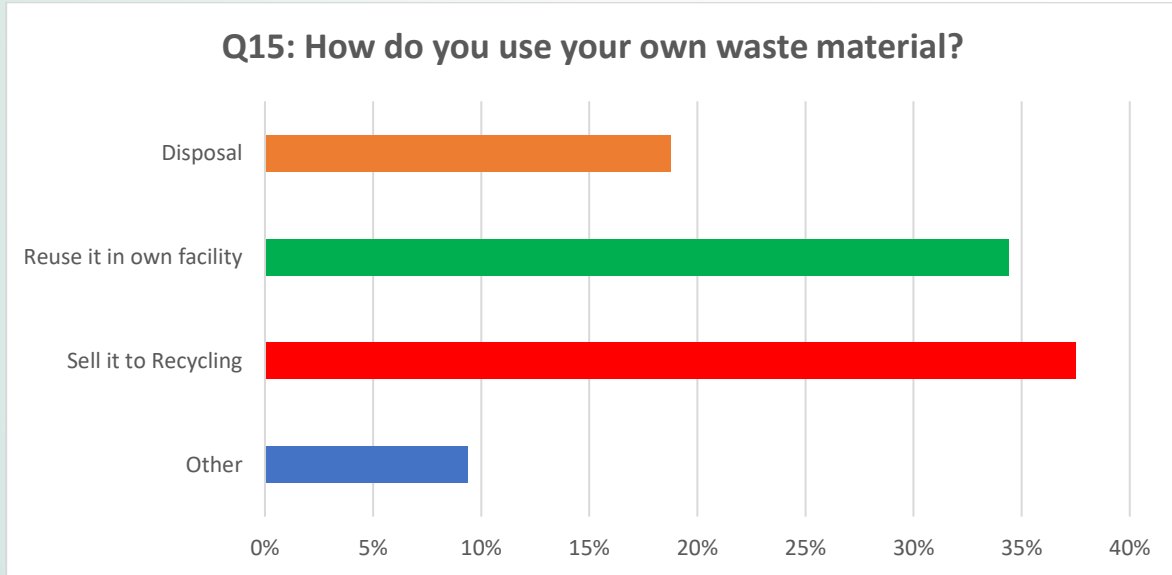
In relation to the previous question, Q12 shall contribute to identify which country has the greatest potential for cooperations outside of Europe. Based on the survey results, it becomes obvious that the USA seem to be the most promising country with almost 50%. In the second place, approximately 18% voted for the option “Others”. For this answer, most of the participants typed China and Malaysia as their most popular country for collaborations.

The next question Q13 ask the participating companies whether they use recycled in their production and if so, which type of recycled material. After question 13 the survey divides the “plastic processing industry” companies again in two strands. The results can be seen in the following two bar chart:

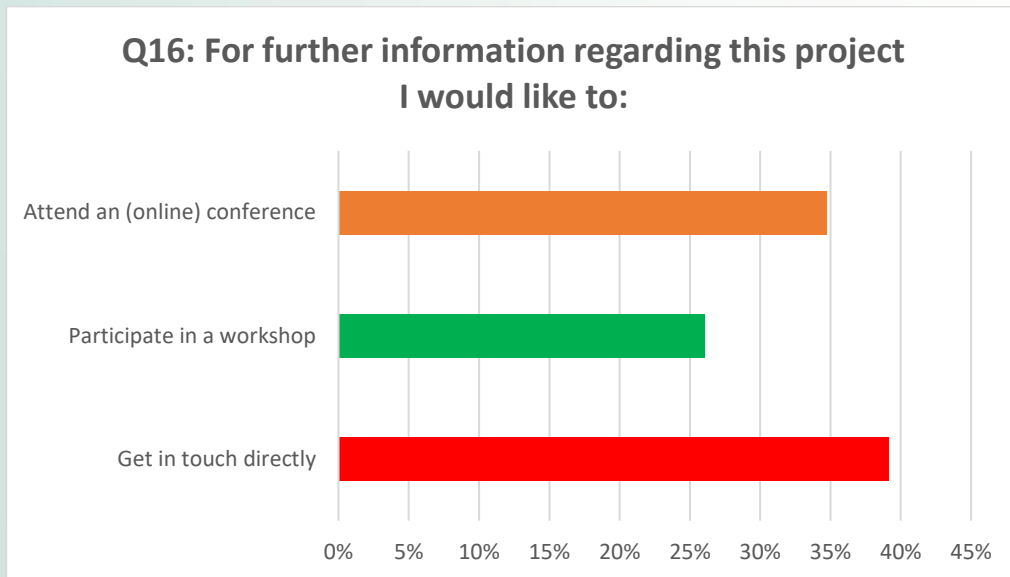




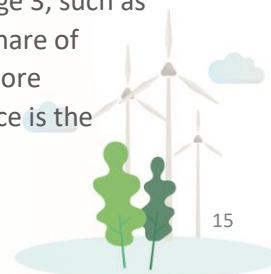
In terms of Q13, almost three-fourth of all 77 companies stated that they already do use recycled materials in their production. Hereby, industrial plastic waste is the most frequently used type of recycled material, as clearly shown in the bar chart of Q14.



In terms of the next question, it was asked how the companies use their own waste material. With nearly 38%, they sell it to recycling. Almost 35% reuse it in their own facilities and 18% give it to disposal. In reference to the option “Others” some of the companies stated that they sell them to their own raw material manufacturers or give them for refurbishment in order to create new products out of the waste material. This answering option applies to nearly 10% of the participating companies.

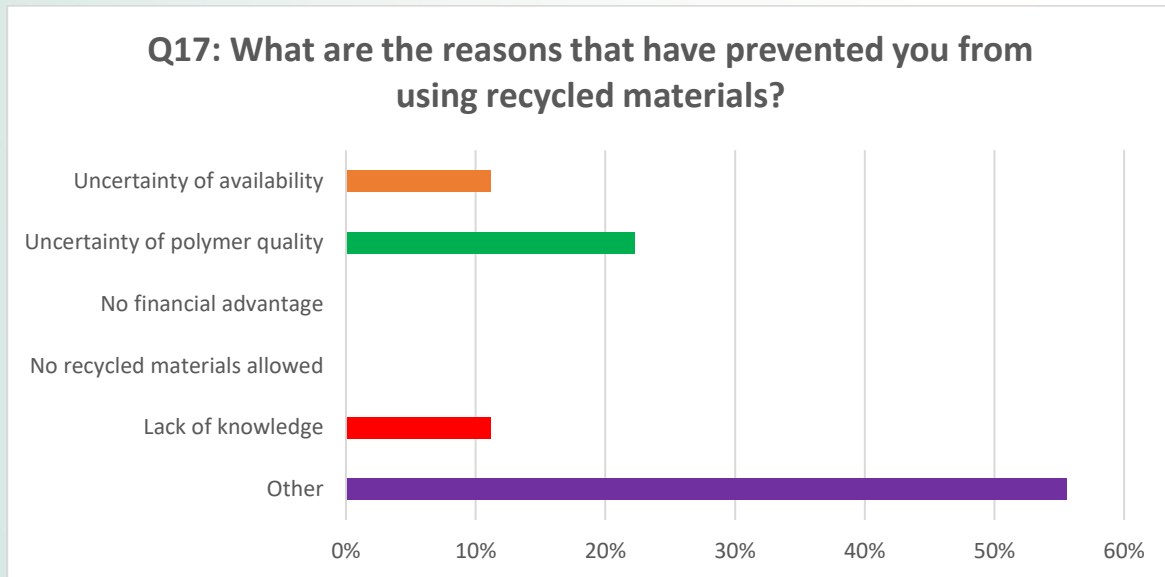


Question 16 was intended to ask the companies whether the measures planned in work package 3, such as the implementation of an online conference, are viewed positively by the companies. With a share of approximately 39%, the majority of them wants to get in touch directly when wanting to get more information regarding the POLREC project. In the second place, attending an (online) conference is the

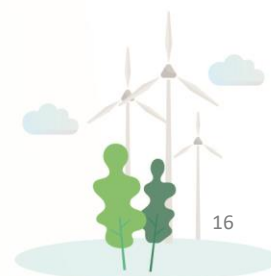
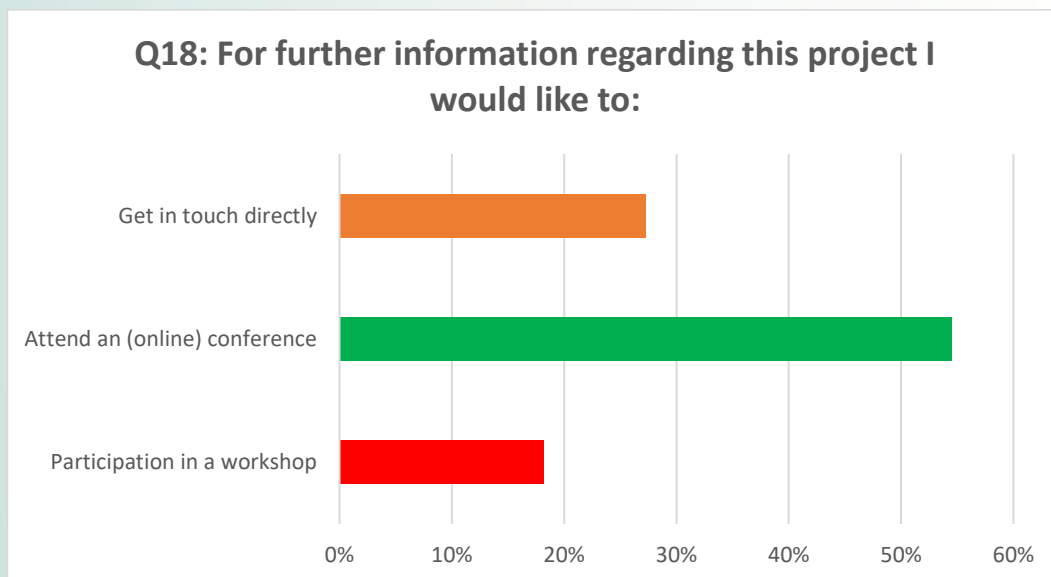




second most preferred option for gathering further project-information. About one-fourth of the companies would rather attend a workshop to get access to further insights about the project.

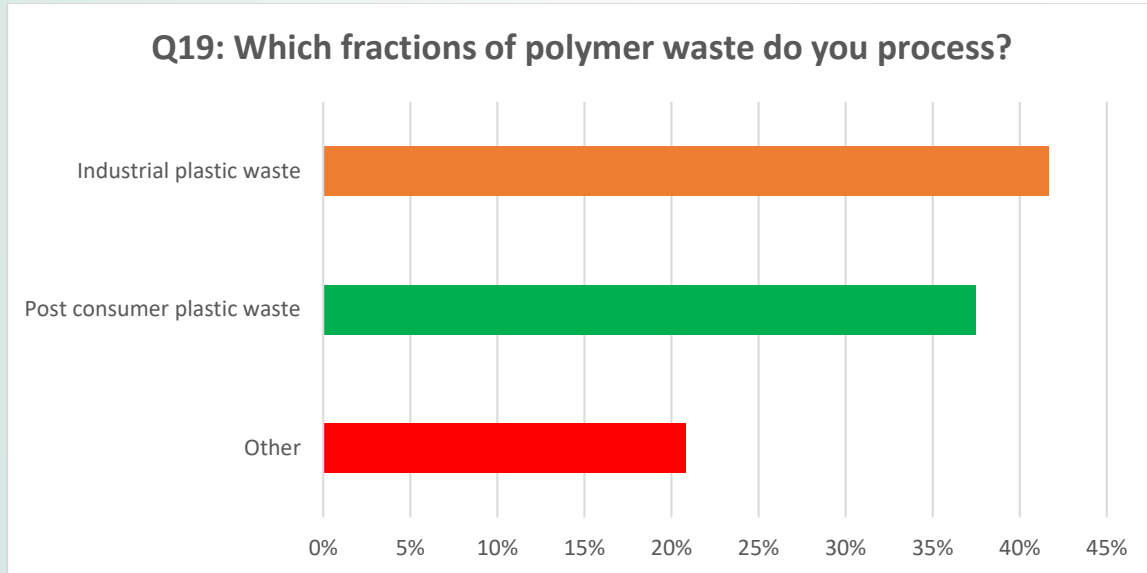


In Q17, the reasons for not using recycled materials were asked for. The results clearly depict the last answering option “Others” was the most chosen one with 55%. Hereby, the participants stated that no viable alternatives are available for using recycled materials. Besides that, some typed that using recycled materials is not an established standard in their business, e.g. in the mechanical engineering sector. Another major aspect of not using recycled materials is the uncertainty of the polymer quality. This answering option was picked by 22% of the participants. The uncertainty about the recycled material’s availability and a lack of knowledge about this topic in general are also reasons for preventing the companies from not using recycled materials. These two statements were chosen by 11% of the respondents. In contrast to the aforementioned options, having no financial advantage due to using recycled materials and being not allowed to use recycled materials do not seem to represent reasons for non-usage, since no company chose one of these answering options.

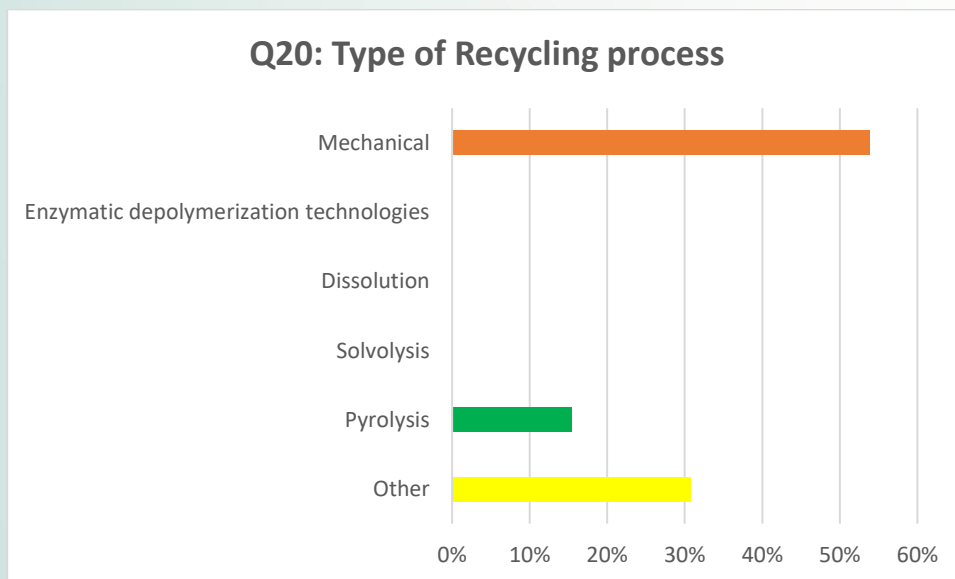




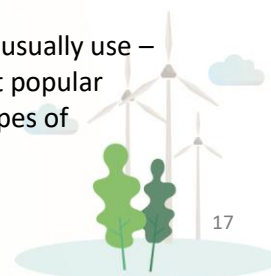
Question 18 is one of the questions that can feel duplicated as noted at the beginning. Question 18 was answered by the companies that answered "no recycling activities" in question 13. According to results, attending an (online) conference in order to get further information about the POLREC project is the most popular way with a share of approximately 53%, followed by getting in touch directly with a share of 27%.



Question 19 onwards was answered by companies that answered "Recycler" to question 4 "What type of industry do you represent?". Q19 asks about the fractions of polymer waste the companies process. Hereby, more than 40% use industrial plastic waste and 37% post-consumer plastic waste. In terms of the answering option "Others", the participants mentioned that they process production disposals, recycled PET/PE pillow fillings, and steel brush contaminated Nylon. Especially the last statement is due to the fact that the very company is providing surface solutions that improve plastic moulding and extrusion processes.

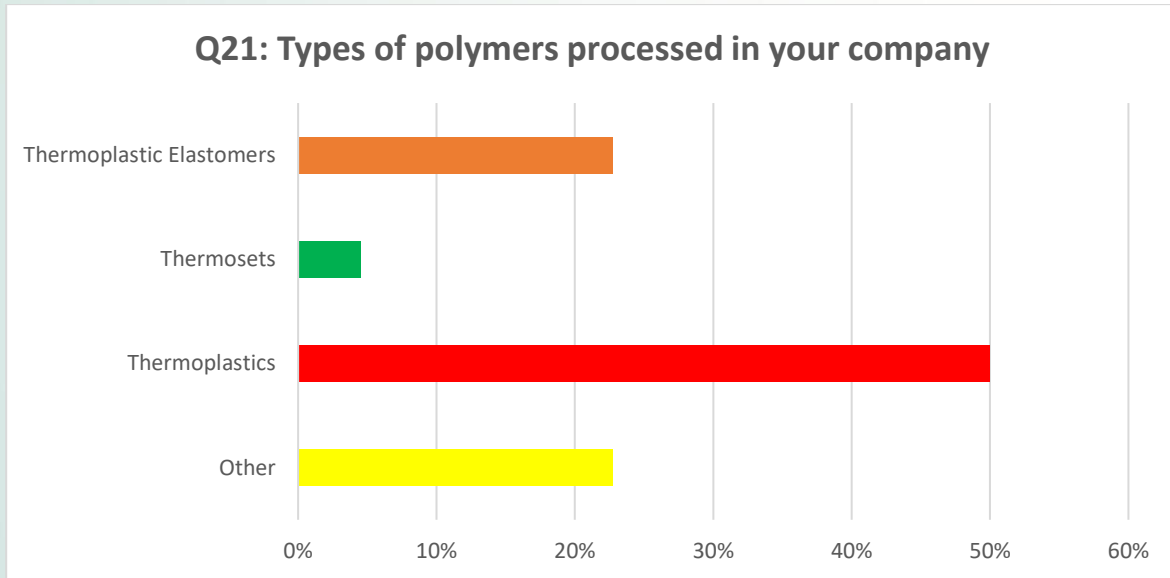


In this question, the participating companies should state which type of recycling process they usually use – provided that they do recycle at all. In case they do recycle, mechanical processes are the most popular types with a share of more than 50%. The answering option "Others" contains the following types of





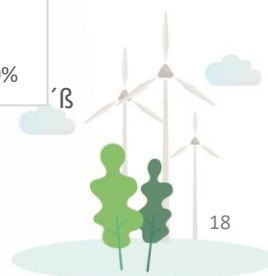
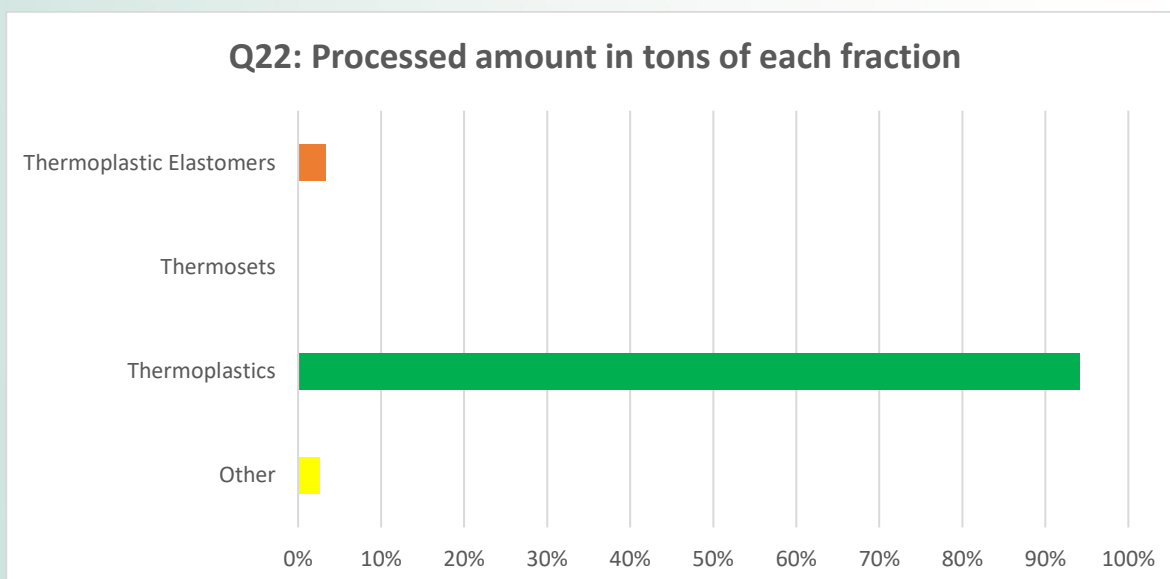
recycling processes: “our surfaces are made by state-of-the-art physical vapor deposition”, “we also upcycle on Twin-screw (including reinforcement with Fiberglas), and “Devulcanization”. Pyrolysis was also chosen as type of recycling process, but only 15% picked this option. Enzymatic depolymerization technologies, dissolutions, and solvolysis were chosen by none of the companies as a method for their recycling processes.



Q21 asks for the types of polymers processed in the companies. Hereby, half of all participants use thermoplastics.

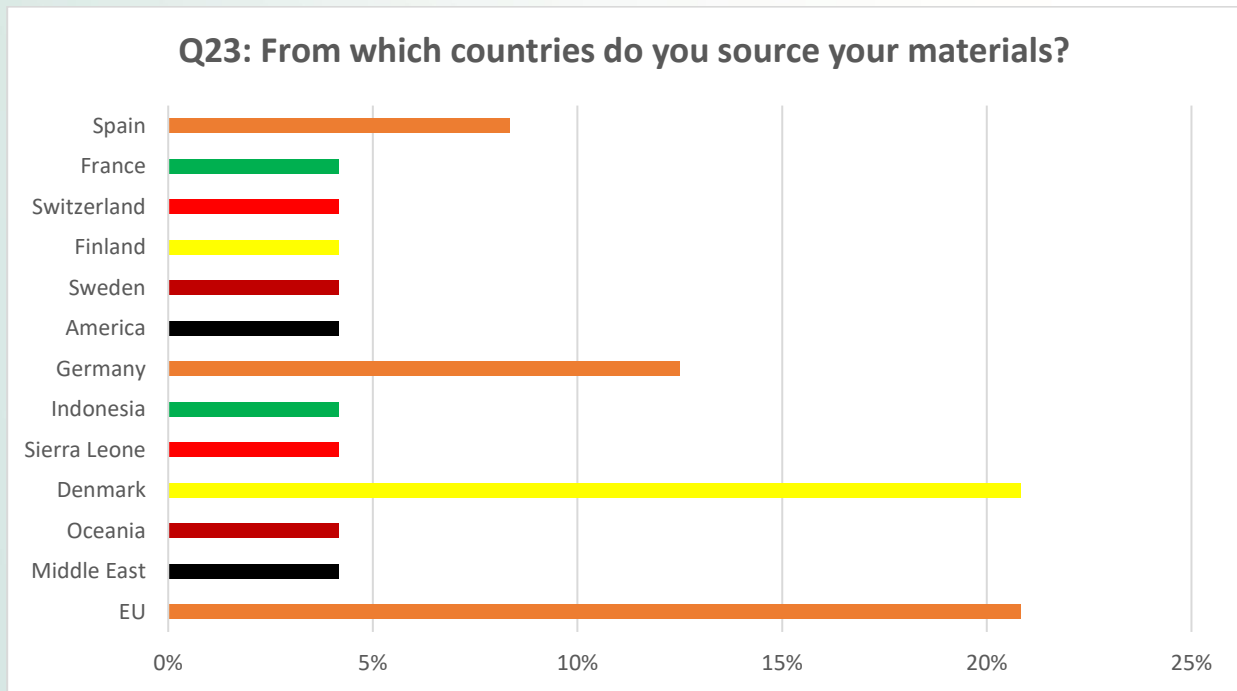
Slightly more than 20% of the companies that responded in the "Recycler" strand indicated "Others" for the Question what types of polymers processed in the company. Here, however, there were only a few explanations that mention of which these are. Among others, Devulcanization of rubber and PET mixed with PE.

In relation to that, Q22 has the intention to get more information about the processed amount of each fraction in tons, as shown in the bar chart below:



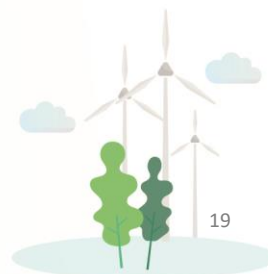


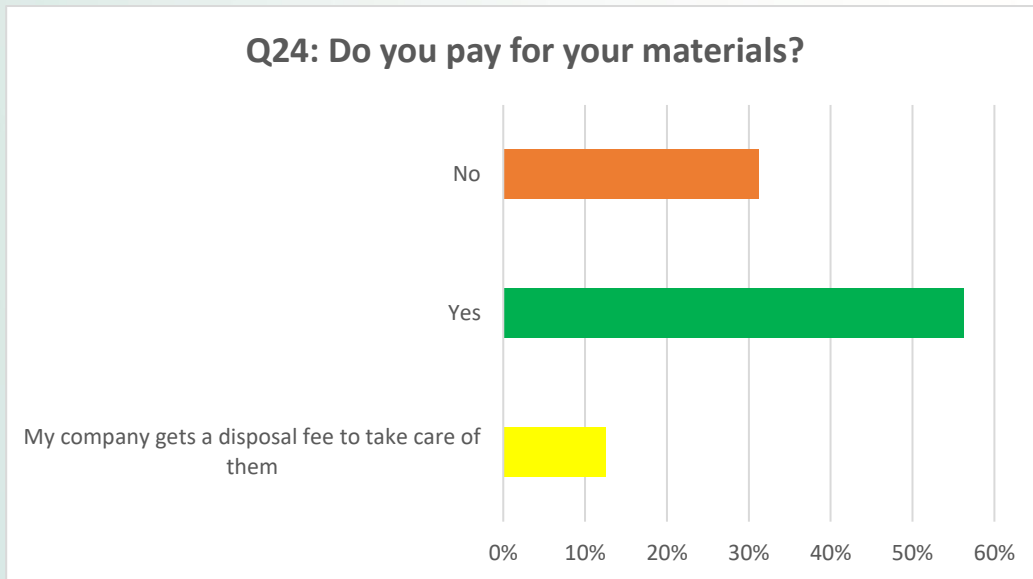
In accordance with the results of the previous question, thermoplastics also make up the largest share of amount of each fraction with more than 90%. Hereby, the exact amount of it is 92.533 tons. For Thermoplastic Elastomers, it is 3.274 tons and for “Others” 2.533 tons. In terms of the answering option “Others”, some companies stated that they process up to 300 tons of Polyethylene and Polyethylene Terephthalate, amongst others.



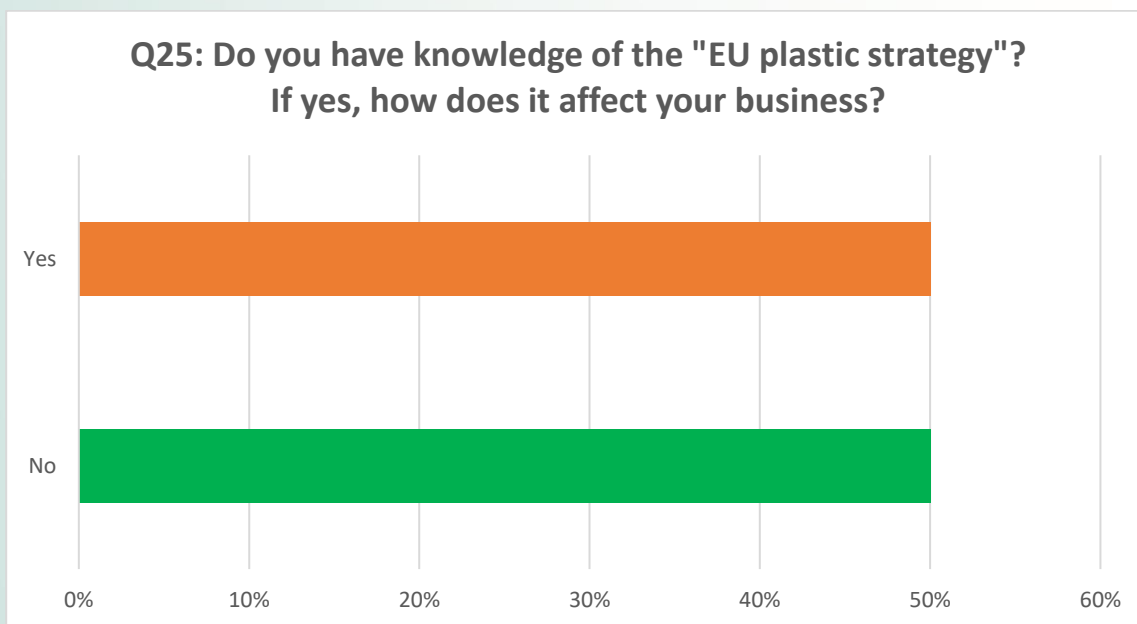
Question 23 (Q23) is an open question, which means that the companies were provided with a free text field for answering the question. Some of the companies answered "EU" in general, while others specified individual countries. For this reason, the analysis includes both the EU in general and specific countries that were listed individually.

Q23 is about the countries where the companies source their materials from. In a global context, the EU has the biggest share with more than 20%. Compared to this, Oceania and the Middle East, Sierra Leone, Indonesia, America, Sweden, Finland, and Switzerland only reach 3% in terms of sourcing materials from. Within European countries, the bar chart depicts that Denmark is the country where most companies source their materials from. With a difference of almost 10%, Germany is on the second place with approximately 13%, followed by Spain with 8%. Since most of the responses came from these 3 countries, one could conclude that most of the companies source their materials from the country they are located into.

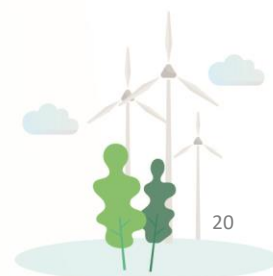




Q24 asks whether the participating companies pay for their materials. Hereby, more than 50% stated that they do so. In contrast to that, approximately 31% do not pay for their materials. With 12%, the smallest share is with the third answering option “My company gets a disposal fee to take care of them”.

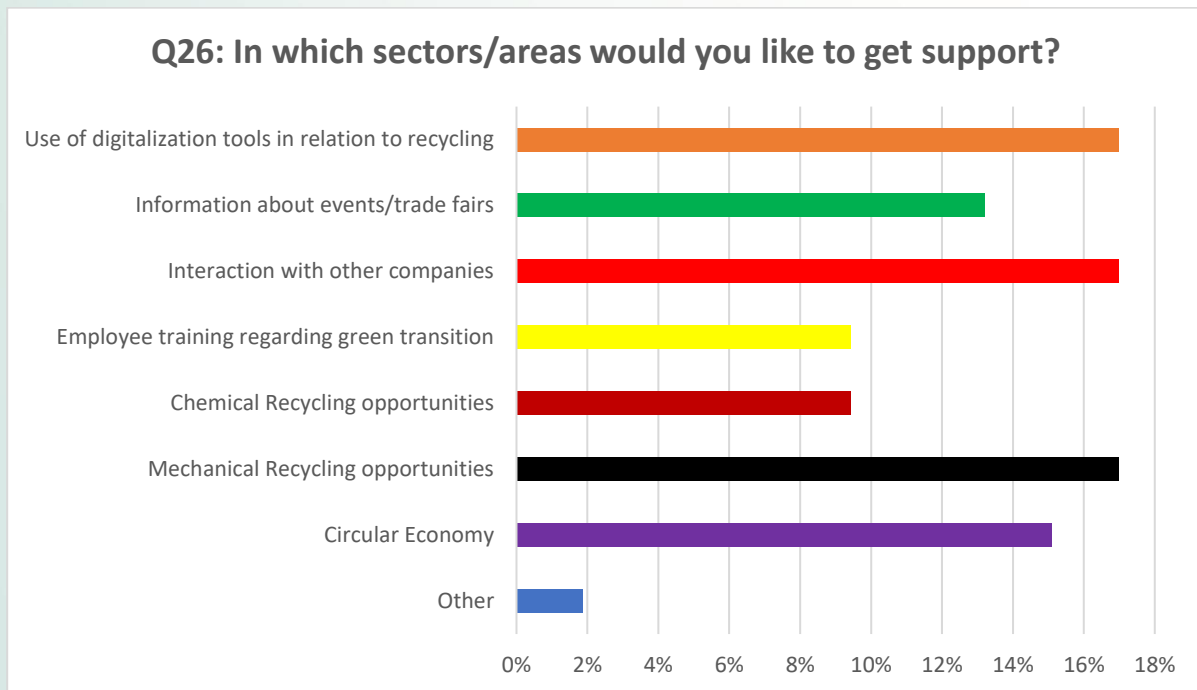


Q25 once more asked the participants if they have any knowledge of the “EU plastic strategy”. This repetition of Q9 is due to the query logic and structure of the questionnaire. In case the companies answered Q4 with “Recycler”, they skipped Q5 until Q18. According to the results, 50% do have knowledge of the “EU plastic strategy” and 50% do not. Besides that, some of the participating companies stated that the strategy would affect their business in a positive way, and they are willing to invest in accordance with the “EU plastic strategy”.

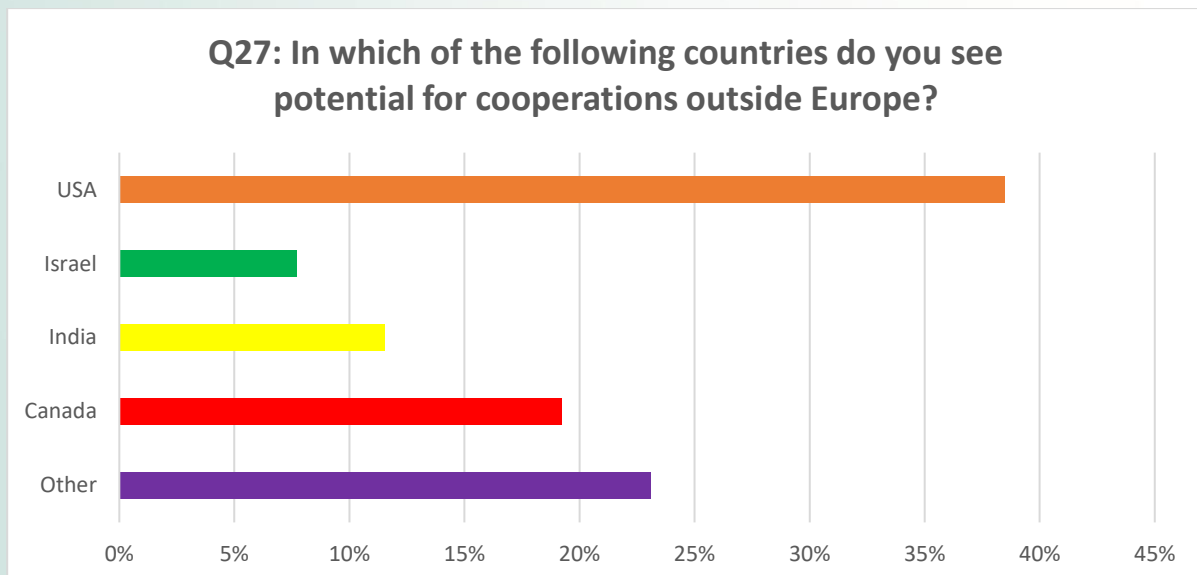




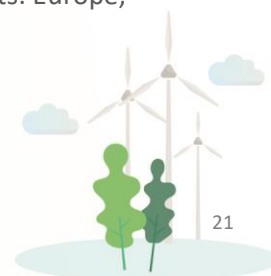
Similar to the structural background of Q25, the next question is also a repetition of Q10, which can be seen beneath:

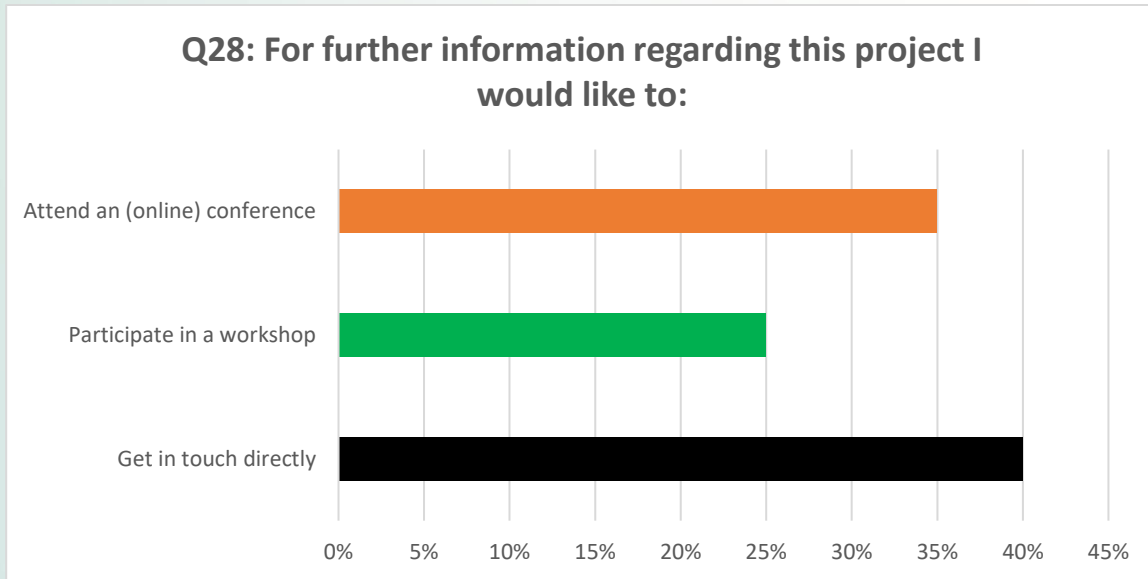


Here, mechanical recycling opportunities also have a comparatively large share with 17%. Besides that, the interaction with other companies and the use of digitalization tools in relation to recycling have the same percentage like “Mechanical recycling opportunities”. This is followed by getting support in terms of circular economy with 15%.



Q27 is a repetition of Q12. In case the companies answered Q4 with “Recycler”, they skipped Q5 until Q18. Hereby, the USA also make up the biggest share with almost 38%. This is followed by “Others” with 23%. This answering option contains the following countries, which were inserted by the respondents: Europe, Scandinavia, South Africa, Japan, Turkey, and North Africa.





Q28 is also a repetition of Q16 and Q18. This question was asked at the end of each section in all 3 questionnaire strands.

Hereby, “getting in touch directly” is the answering option with the largest share, namely 40%. Attending an (online) conference is the second most preferred option with 35% followed by participating in a workshop with 25%.

6. Conclusion and further steps

What conclusions can we draw from the results so far?

With 70% of the participants, small and medium-sized companies in the plastics processing industry took part in the survey. Most of them mentioned that they work in the field or use of "Thermoplastics".

Nearly 75% of the companies that participated in the survey use recycled material in their companies. More than 30% of the companies reuse their own plastic waste in their own company, and more than 35% of the companies sell the material to recyclers. Almost 35% dispose their waste material.

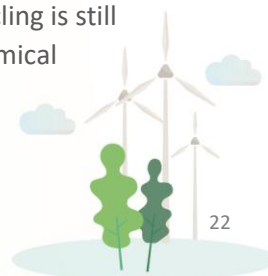
It turns out that the materials are mainly purchased from the EU in general or from individual countries in particular. Most of the material is purchased directly from a supplier.

When asked which non-European country represents the greatest potential for possible cooperation, the majority of respondents named the USA.

Most recyclers source their materials locally. Most of the material they process comes from industrial production. Household waste is in second place.

When recycled polymers are used they normally come from industrial waste.

Among recyclers, the greatest interest is in mechanical recycling. The interest in chemical recycling is still somewhat restrained, but this is due to the little knowledge available so far with regard to chemical recycling.





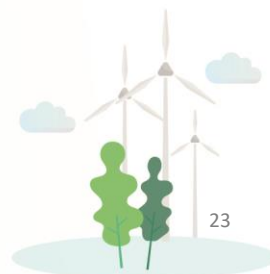
D3.5 – Findings

If we look into the area of the support possibilities of the project for the SMEs, we can see that the interest is wide-ranging. The greatest interest is shown in the area of networking and knowledge exchange with other companies, among others. Alongside "mechanical recycling opportunities", digitization is one of the fields that has aroused the most interest.

Based on this survey, further steps include the planning of an online conference that covers the topics mentioned by the companies. The conference will also serve to introduce the companies to each other and to identify potential areas of cooperation. The conference will take place in the course of March.

Until then, the project partners will continue to promote the project in their committees and networks in an attempt to attract further participants.

The survey is still available online and the partners of the project will continue to promote it across their network of members and industrial SMEs in order to receive as much answer as possible for building the mapping of European recyclers and waste of streams and to identify the SME's needs in order to implement the FSTP open calls.





Annex 1 – Questionnaire (English Version)





We need your experience and support in the field of sustainability and plastics recycling

Supporting a green and resilient Europe through POLymer RECYcling

With this survey we would like to introduce a European funded project we are involved in: Supporting a green and resilient Europe through POLymer RECYcling, in short "POLREC". The aim of this project is to increase recycling activities in the plastic sector and to ensure a sustainable and circular development.

With the funds granted to us, we can offer direct support to you as a company, for example in terms of participation in training courses, visits to trade fairs or professional congresses. Direct funding is also available for testing innovative processes in the recycling environment including implementation of digital solutions.

This survey serves as an initial assessment of the European plastic waste streams and of your interests and needs related to this topic. The information obtained will be used to plan specific actions.

Please contact us if you have any questions or further suggestions!

Duration approx. 10 minutes.

All information provided in this survey will of course be treated confidentially.

1. In which country is your company located?

- Denmark
- France
- Germany
- Other (please specify)
- Portugal
- Spain

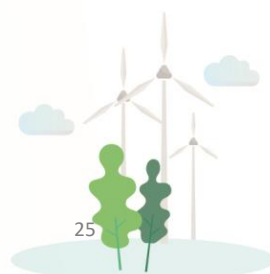
2. Company Name

3. Number of people employed in your company?

- 1-9 employees
- 10-49 employees
- 50-249 employees
- 250-499 employees
- > 500 employees

4. What type of industry do you represent?

- Plastic processing industry
- Recycler





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5. Types of polymers processed in your company?

Thermoplastics
(please list polymer types)

Thermosets
(please list resins and fillers)

Thermoplastic Elastomers
(please list polymer types)

Other
(please specify)

6. Annual consumption in tons of each fraction?

Thermoplastics
(please list polymer types)

Thermosets
(please list resins and fillers)

Thermoplastic Elastomers
(please list polymer types)

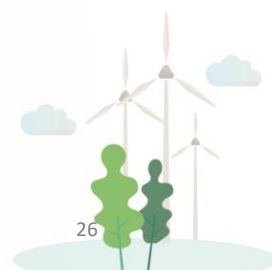
Other
(please specify)

7. From which companies and countries do you buy your raw materials?

8. From which platforms/raw material stock markets do you use to purchase your material?

- None
- Directly from supplier
- Other (please specify)

following:





9. Do you have knowledge of the "EU plastic strategy". If yes, how does it affect your business?

- No
- Yes, as below:

10. In which sectors/areas would you like to get support from POLREC?

- Circular economy
- Mechanical recycling opportunities
- Chemical recycling opportunities
- Employee training regarding green transition
- Other (please specify)
- Interaction with other companies
- Information about events/trade fairs
- Use of digitalization tools in relation to recycling (e.g. quality control or tracking of materials)

11. What types of collaborations regarding green transition would you be interested in?

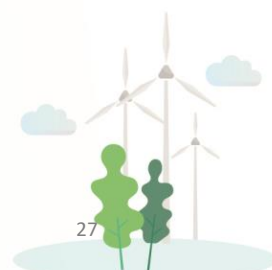
- Common Events
- Matchmaking
- Knowledge sharing
- Become part of a value chain
- Building international business cooperations
- Other requests:

12. In which of the following countries do you see potential for cooperations outside Europe?

- Canada
- India
- Israel
- USA
- Other suggestions:

13. Do you use recycled materials in your production?

- Yes
- No





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Present user of recycled material

14. Type of recycled material?

- Post consumer plastic waste
- Industrial plastic waste
- Other (please specify)

15. How do you use your own waste material?

- Sell it to Recycling
- Reuse it in own facility
- Disposal
- Other (please specify):

16. For further information regarding this project I would like to:

- Participate in a workshop
- Attend an (online) conference
- Get in touch directly
- My contact information:





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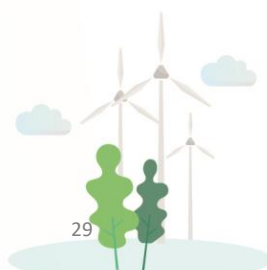
No recycling activities

17. What are the reasons that have prevented you from using recycled materials?

- Lack of knowledge
- Uncertainty of polymer quality
- No recycled materials allowed
- Uncertainty of availability
- No financial advantage
- Other (please specify)

18. For further information regarding this project I would like to:

- Participate in a workshop
- Attend an (online) conference
- Get in touch directly
- My contact information





We need your experience and support in the field of sustainability and plastics recycling

Recycler

19. Which fractions of polymer waste do you process?

- Post consumer plastic waste
- Industrial plastic waste
- Other (please specify):

20. Type of Recycling process?

- Pyrolysis
- Solvolysis
- Dissolution
- Enzymatic depolymerization technologies
- Mechanical
- Other (please specify):

21. Types of polymers processed in your company?

Thermoplastics

(please list polymer types)

Thermosets

(please list resins and fillers)

Thermoplastic

Elastomers

(please list polymer types)

Other

(please specify)





22. Processed amount in tons of each fraction?

Thermoplastics
(please list polymer types)

Thermosets
(please list resins and fillers)

Thermoplastic
Elastomers
(please list polymer types)

Other (please specify):

23. From which companies and countries do you source your materials?

24. Do you pay for your materials?

- Yes
- No
- My company gets a disposal fee to take care of them

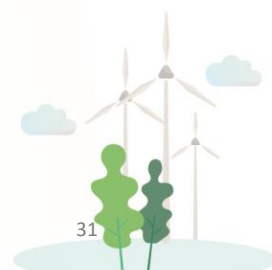
Other (please specify):

25. Do you have knowledge of the "EU plastic strategy"? If yes, how does it affect your business?

- No
- Yes, as below:

26. In which sectors/areas would you like to get support?

- Circular economy
- Mechanical Recycling opportunities
- Chemical Recycling opportunities
- Employee training regarding green transition
- Other (please specify)
- Interaction with other Companies
- Information about events/trade fairs
- Use of digitalization tools in relation to recycling (e.g. quality control or tracking of materials)



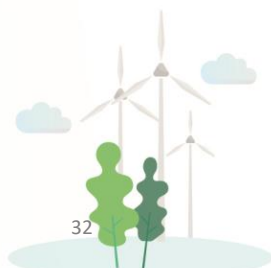


27. In which of the following countries do see potential for cooperations outside Europe?

- Canada
- India
- Israel
- USA
- Other suggestions:

28. For further information regarding this project I would like to:

- Participate in a workshop
- Attend an (online) conference
- Get in touch directly
- My contact information:





PELREC We need your experience and support in the field of sustainability and plastics recycling

Thank you for your support!

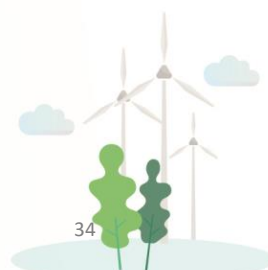




PROJECT INFORMATION

Grant Agreement	Project 101074434 — POLREC
Programme	Single Market Programme (SMP COSME)
Call	SMP-COSME-2021-CLUSTER
Topic	SMP-COSME-2021-CLUSTER-01
Type of action	SMP Grants for Financial Support
Project Title	Supporting a green and resilient Europe through POLymer RECYcling
Project starting date	1 st September 2022
Project end date	31 st August 2025
Project duration	36 months

PROJECT CONSORTIUM



PROJECT

POLREC



Funded by
the European Union

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