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# **REVISION HISTORY**

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(\*) Action: C = Creation, I = Insert, U = Update, R = Replace, D = Delete

# **REFERENCED DOCUMENTS**

ID	Reference	Title
1	2021-1-EL01-KA220-VET- 000034695	AR4RECLOTHING Proposal
2	PR1 / T1.1.1	National Research Report

# APPLICABLE DOCUMENTS

ID	Reference	Title
1		
2		





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Stimulating gender-based innovative training methods to promote CLOTHING REcycling through Augmented Reality

# 1. Introduction

# **1.1 Scope of the project**

Research has depicted the linkage between environment-oriented activities and gender disparities. In fact, gender equality matters to environmental sustainability with women performing two thirds of global working hours and being more dependent on natural resources in comparison with men (Irish Aid, 2013). However, the agenda promoting the importance of gender equality for the ecosystem still remains unfinished despite all the initiatives taken towards the establishment of eco-friendly activities (UN women, 2014). Therefore, while there is still a high level of gender inequality, women act as half of the world's resource managers, making their role crucial towards safeguarding the environment (Global Environment Facility, 2018). With clothing upcycling being the new trend for green fashion, there has been no concrete initiative promoting women's active participation in upcycling practices, despite EU's endeavor towards environmental sustainability. Therefore, the need for VET trainers and textile professionals (manufacturers, designers, colorists, etc.) to engage in an open dialogue in order to support gender-based training towards buckling down environmental challenges through clothing upcycling activities constitutes a brand-new initiative in alignment with EU goals for resource efficiency (Europe 2020 Strategy).

# **1.2 Purpose of the document**

The objective of the present report is to present the results of the needs verification analysis performed with representatives of the target group at national level. The organization involved 25 participants from the project target audience in order to validate the needs conceived during the thorough desk research conducted both at pre-application level and as part of the project activities. Therefore, the current report collects the results of the needs verification questionnaire addressed to textile manufacturers/students/professionals/NGOs for gender equality and/or environmental sustainability and other stakeholders. The aim is to receive valuable feedback towards developing training materials tailored to the current state of play and the actual needs in the field of textile upcycling and environmental consciousness.

# **1.3 Project target groups**

The target groups addressed and affected by this research are:

- Directly:
  - Textile professionals (manufacturers, designers, colorists, stylists, converters, etc.) interested in or already taking initiatives towards environmental sustainability
  - VET & Textile experts willing to actively participate in an open dialogue about green methods that establish the importance of gender equality for the ecosystem





- HEI with Textile departments
- > Indirectly:
  - VET training organizations
  - Public bodies
  - NGOs or other organizations/authorities taking initiatives towards renewable resources and energy efficiency
  - AR developers or developers/organizations willing to embrace innovative digital solutions for sustainable training purposes and enhanced learning experiences
  - Policy makers

# 2. Methodology

# 2.1 Needs Verification Questionnaire

The questionnaire distributed either through online surveys or in a printed format was the following:

#### 1. Introduction

Hello future AR4Recloth-ers!

Our team has conducted extended research in Romania, Greece, Poland, Spain, Latvia and the Netherlands to map the needs at national level in green practices, gender equality and clothing upcycling!

This questionnaire aims to receive your input in order to establish that our findings are valid! Our goal is to create personalized training materials and tools tailored to your own needs!

Will you help us?

It will only take you *10 minutes* and all information will be kept confidential and will be used ONLY for the purposes of the project!

Thank you in advance for your time!

### 2. Questions

#### 2.1 Demographic Data

- 2.1.1 What is your gender?
  - Female





- Male
- □ Agender
- Bigender
- Nonbinary
- Other
- Prefer not to say
- 2.1.2 What is your level of education?
  - □ None
  - High School
  - □ College / Vocational education
  - Bachelor
  - Master
  - D Ph.D
- 2.1.3 What is your current occupation?
  - □ I am a student in Textile/Clothing Manufaturing
  - □ I am a student in Social/Humanitary/Gender studies
  - □ I am a student in Environmental studies
  - □ I have just finished my studies and looking for a job
  - □ I work in the textile manufacturing industry
  - □ I work for the protection of the environment
  - □ I work for societal issues (incl. Gender equality)
  - □ I am currently unemployed
  - □ I prefer not to say
  - Other

#### 2.2 Level of awareness

Regarding your knowledge about eco-sustainable practices, please answer to the following questions:

2.2.1 Have you heard of any actions initiated by women towards environmental sustainability?

6

- Yes
- □ No
- Not sure

2.2.1.a If yes, please shortly describe them below



Regarding your knowledge about green practices, please answer to the following questions:

- 2.2.2 Have you heard of any environmental actions in the textile industry?
  - Yes
  - □ No
  - Not sure

2.2.2.a If yes, please shortly describe them below

2.2.3 What is your level of awareness in relation to the following practices/concepts? (1=not aware at all, 5=fully aware)

	1	2	З	4	5
2.2.3.a Circular clothing for sustainability					
2.2.3.b Circular material use					
2.2.3.c Sustainable Design					
2.2.3.d Digital solutions for sustainable innovations					
2.2.3.e Awareness-raising campaigns for clothing recycling					
2.2.3.f Awareness-raising actions for responsible textile consumption					
2.2.3.g Sustainable business models					
2.2.3.h Sustainability in fashion industry					
2.2.3.i Women participation in the protection of the environment					
2.2.3.j Gender-based training/learning methods					

#### 2.3 Level of skills

2.3.1 What is your level of skills regarding the following? (1=lowest level, 5=highest level)

	1	2	3	4	5
2.3.1.a Creativity					
2.3.1.b Teamwork					
2.3.1.c Understanding of the work to be done					
2.3.1.d Problem-solving					
2.3.1.e Planning					
2.3.1.f Communication					
2.3.1.g Public speaking					
2.3.1.h Attention to detail					
2.3.1.i Self-motivation					
2.3.1.j Leadership					
2.3.1.k Negotiation					



#### 2.4 Experience

- 2.4.1 Have you received any kind of training about environmental sustainability?
  - Yes
  - No

2.4.1.a If yes, please shortly describe them below

- 2.4.2 Have you received any kind of training about gender equality?
  - Yes
  - No

2.4.2.a If yes, please shortly describe them below

2.4.3 Have you received any kind of training about textile upcycling?

□ Yes □ No

2.4.3.a If yes, please shortly describe them below

#### 2.5 Interest

- 2.5.1 Do you like the idea of AR4Recloting?
  - Yes
  - No
  - Not sure

2.5.1.a If no, please shortly explain below





- 2.5.2 Are you interested in further participating in AR4Recloting activities?
  - Yes
  - □ No
  - Not sure

2.5.2.a If no, please shortly explain below

Thank you so much for your time!

You can learn more about our news here: <u>http://ar4reclothing.erasmusplus.website/</u>

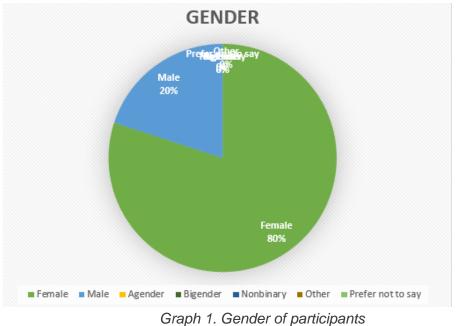




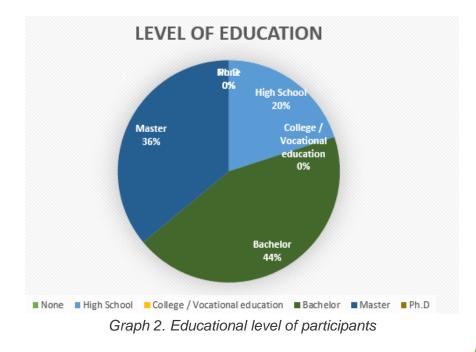
# 3. Results

# 3.1 Demographic data

### 3.1.1 Gender



#### 3.1.2 Level of education





### 3.1.3 Current occupation

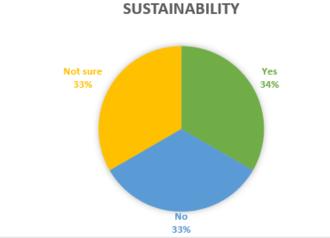


Graph 3. Current occupation of participants

ACTIONS BY WOMEN FOR ENVIRONMENTAL

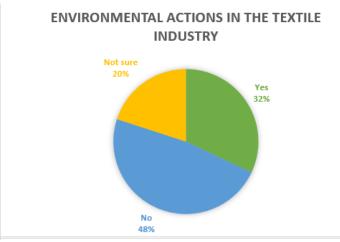
# 3.2 Level of awareness

#### 3.2.1 Knowledge of existing eco-sustainability actions by women



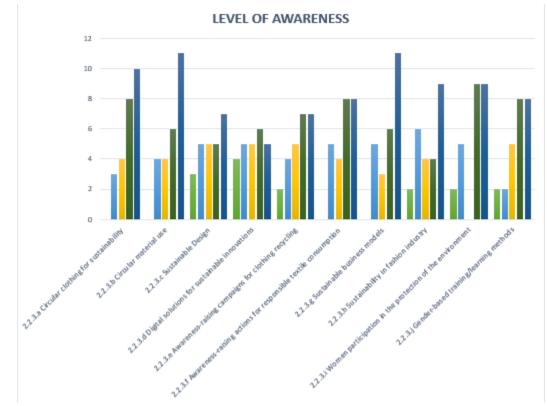
Graph 4. Participants' knowledge in environmental actions by women





### 3.2.2 Knowledge of existing eco-sustainability actions in textile industry

Graph 5. Participants' knowledge in environmental actions in textile



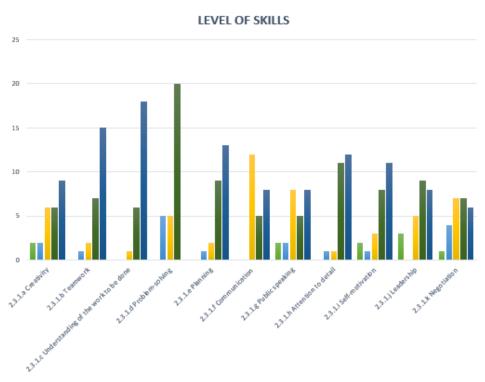
### 3.2.3 Awareness of sustainable and gender-equality concepts

Graph 6. Participants' awareness in sustainable texting upcycling and gender equality



# 3.3 Level of skills

### 3.3.1 Level of hybrid skills



Graph 7. Participants' skills for sustainable textile upcycling

# 3.4 Experience

### 3.4.1 Prior training for environmental sustainability



Graph 8. Participants' prior training for environmental sustainability

13

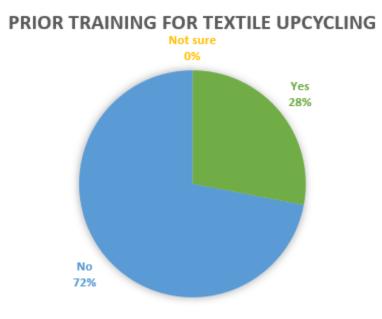


### 3.4.2 Prior training for gender equality



Graph 9. Participants' prior training for gender equality

### 3.4.3 Prior training for textile upcycling



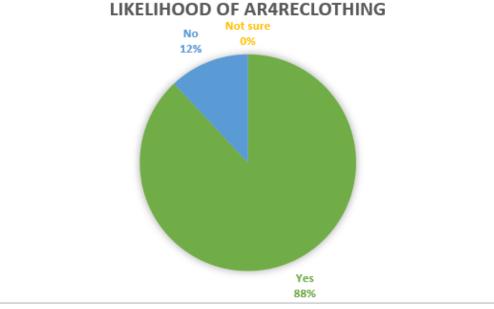
Graph 10. Participants' prior training for textile upcycling





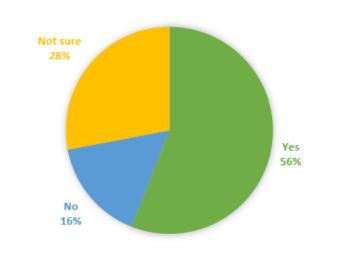
## 3.5 Interest

### 3.5.1 Likelihood of AR4ReClothing



Graph 11. Participants' preference in the project

### 3.5.2 Interest in further participation



### FURTHER INTEREST IN AR4RECLOTHING

Graph 12. Participants' interest in further participation





#### What is the gender of most respondents?

The females with the 80% of respondents, over the males with the remaining 20%. What is the educational level of most respondents?

The group of Bachelor's students with 44%, then the students who has studied Master (36%) and finally students in High School (20%).

#### What is the current occupation of most respondents?

The group of people who have just finished his studies and are looking for a job (20%).

What is the average level of awareneness for each of the practices examined?

- Circular clothing for sustainability: 4
- Circular material use: 3,96
- Sustainable Design: 3,32
- Digital solutions for sustainable innovations: 3,12
- Awareness-raising campaigns for clothing recycling: 3,52
- Awareness-raising actions for responsible textile consumption: 3,76
- Sustainable business models: 3,92
- Sustainability in fashion industry: 3,48
- Women participation in the protection of the environment: 3,72
- Gender-based training/learning methods: 3,72

#### What is the average level of skills for each of the competences examined?

- Creativity: 3,72
- Teamwork: 4,44
- Understanding of the work to be done: 4,68
- Problem-solving: 3,5
- Planning: 4,36
- Communication: 3,84
- Public speaking: 3,6
- Attention to detail: 4,36
- Self-motivation: 4
- Leadership: 3,76
- Negotiation: 3,52

Do participants have prior experience in any of the three key areas of the project? What is the rate? Firstly, in the environmental sustainability area, a 56% have had a prior experience. The same thing happens in the gender equality area, the 56% had prior experience. Finally, in the textile upcycling area, only 28% had a prior experience in that field.

#### Do they express interest in further participating in the project activities? What is the rate?

The 56% of the respondents have an interest in further participating in the project activities. The 28% are not sure and the 16% haven't interest in more activities about the project.



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#### General conclusions:

On the one hand there is a greater interest in the project on the part of women. Also, that most of the respondents have a good level of studies of bachelor's or master's degree, and are looking for their first job; or are already working in a field related to gender, nature care or the textile sector. In general, there is a fairly high level of awareness of recycling clothes, protecting the environment with sustainable business models in the textile sector and the involvement of women in these activities. On the other hand, the respondents have remarkably developed interpersonal skills, highlighting planning, understanding of work and motivation. In addition, a very significant number of respondents have had experience in one of the key fields of the project: gender, environment and textile sector. Finally, we can conclude that the data suggest that the project is perfectly feasible and that more than half of the respondents are interested in continuing to participate in future project activities.

