



GIF - Green Innovation in the Fashion industry management

INTERNATIONAL STATE-OF-THE-ART ANALYSIS REPORT



GIF the Fashion industry management

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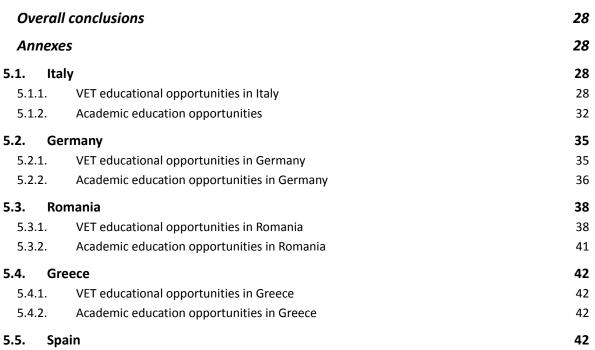
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1. INTRODUCTION

The textile sector has been steadily expanding for a long time; nonetheless, it is one of the most polluting sectors on the planet, accounting for 5-10% of global CO2 emissions. In recent years, especially aided by the European Green New Deal, there has been an endeavour and focus in the European Union to lessen this problem through the use of new sustainable materials, green energy, and training for owners and workers in those businesses. The majority of textile industry manufacturers are small and medium-sized businesses, occasionally creative but largely traditional, that have just begun to flourish in response to the increasing demand for fast fashion textile items. The established partnership chose to apply to this project in order to address, from an educational and higher educational standpoint, the challenges associated with the growth in CO2 emissions all over the world, particularly in Eastern Europe.

The GIF project will create online training courses and a training kit to help people develop novel approaches and ideas for a "greener" textile industry. Through e-learning courses, best practices, creative green initiatives, multiplier events, and exchanges of knowledge and expertise in the relevant sector, GIF will produce new ideas and training for stakeholders to learn how to minimize their emissions and waste. The chosen partners represent all sectors, from TVET to Green fashion industry groups, in relation to the training that will be established for trainers, owners, and textile employees.

Following the EU Green Deal, a long-term ambitious goal is to reduce Co2 emissions from the textile sector. Addressing stakeholder best practices and providing them with tools to green their industries will be critical for the future of the European Union and its 2050 ambitions, taking into account the Sustainable Development Goals and the UNEP plan.

The project collaboration began execution of the first work package: the GIF competence framework. The national findings are presented in this document as a state-of-the-art report based on data from five project partner countries: Italy, Germany, Spain, Greece, and Romania. The goal of this research is to create a knowledge base map of existing educational offerings, and assess the present status of competences in the sustainable fashion and textile industry of each country, in order to guarantee that learners acquire relevant skills, competencies, and information on sustainable fashion and textile practices following the GIF project results.

2. MAIN GOALS AND METHODOLOGY

The coordinating partner (CNPCD) developed the template and instructions, which were provided to other partners in June 2022. The report represents an overview of the national and European sustainable development and environmental protection aspects, related to the fashion and textile





sector, in order to create a summary of existing academic and vocational educational program and offers, as well as a review of good practices of the current market.

The primary sources of the qualitative and quantitative data in this research were derived through a thorough examination of existing initiatives, activities, and training opportunities. During the initial research phase of the project, the state-of-the-art report aims to:

- understand the level of existing knowledge and highlight the importance of sustainable development and environmental protection within the fashion and textile industries in each partner country, and identify the gaps in this existing knowledge base
- identify opportunities in each partner country within academic and vocational education fields related to the scope of the project (sustainable development and environmental protection in the fashion and textile industry)
- understand good practices on the market and understand the level of implementation of sustainable development and environmental protection practices in the field of fashion and textiles
- identify financing opportunities for sustainable fashion and textile businesses.

Thus, the review contains the following information for each partner country:

- 3 educational offers regarding sustainable development and environmental protection in the fashion and textile industry in the academic field (Bachelors, Masters, Short training programs)
- 3 educational offers regarding sustainable development and environmental protection in the fashion and textile industry in the VET field (courses, workshops, trainings, projects)
- 3 good practices from the industry
- 3 financing opportunities for sustainable fashion businesses.

This enables the identification of competences linked to sustainable development and environmental protection in the fashion and textile industry, as well as the identification of gaps in knowledge in the sustainable development and environmental protection practices in the field of fashion and textiles in each country represented in the consortium.

3. NATIONAL RESULT SUMMARY

The results obtained by performing the analysis in every partner country are covered in this report section. Each national analysis contains the following chapters:

- General introduction
- Methodology
- Educational offers in each partner country (VET and academic)





- Good practices in the national fashion and textile market
- Financing opportunities
- Conclusion & identifying the gaps

3.1. Italy

3.1.1. General Introduction

Education in Italy is free and compulsory for children aged between 6 and 16 years. The Italian education system is divided into nursery, kindergarten, elementary school, middle school, and high school. The education system in Italy is divided into five main levels:

1.Preschool (Scuola materna) or nursery (Scuola dell'infanzia/Asilo nido) – non compulsory 2.Primary education (Scuola primaria) - compulsory

3.Lower secondary school (Scuola secondaria di primo grado/Scuola Media) - compulsory

4.Upper secondary school (Scuola secondaria di secondo grado/Scuola Superiore) – equivalent of high school

4.1. Technical and Professional Institutes - alternatively

5.University

- Bachelor's degree (Laurea)
- Master's degree (Laurea magistrale)

- PhD (Dottorato di ricerca)

Universities play a crucial role in the short-term implementation of education for sustainable development goals (SDGs). The fourth SDG aims to "ensure inclusive and equitable quality education and to promote lifelong learning opportunities for all". Indeed, SDG4 is not intended as a goal in itself, but rather, a tool to achieve different goals and explore the best practices, via deductive-theoretical or inductive-experiential methods.

An education in sustainability for fashion design students in the VET sector is about meeting the growing need for integrating sustainability knowledge with practical skills training in fashion design to make students ready for the future needs of our industry and society.

Education for Sustainability (EfS) is directed to new generations of leaders and local actors, to contribute to the promotion of sustainability in the socio-technical systems. Higher education institutions (HEIs) often manage large scale portions of cities (e.g., buildings, laboratories, dormitories), in which sustainability principles could be "practised after preached". In this sense, the contribution of HEIs to SDGs implementation goes well beyond the curricula development, and HEIs can be considered as learning communities, in which a variety of practices, discourses and policies coalesce, leading to the elaboration of complex and changing representations and practices of sustainability, and even more difficult to grasp behavioural changes.

The recent creation of the Italian Network for Sustainable Universities (RUS), recognised by the Conference of Italian University Rectors (CRUI) in July 2015, is aligned with the The Sustainable Development Solutions Network (SDSN) aims. It is part of a national institutional resetting on the SDGs implementation, intending to coordinate the actions of all campuses willing to shift the business as a usual model towards a just, sustainable future.

The VET educational system in Italy is structured in two macro-bands:

- the first one is accessible after passing the lower secondary school (or middle school, which lasts three years and ends at 13 years of age) and includes vocational institutes. This VET path lasts 5 years and is an alternative to high school (which in Italy lasts 5 years as well)





- regional vocational training, generally accessible after passing the secondary so (which lasts 5 years and ends at 18 years of age), which includes second-rever regional vocational training, namely IFTS and ITS.

An "Istituto tecnico superiore" (abbreviated ITS – Higher Technical Institute) is an Italian tertiary educational institution. They were established in 2008, and are modelled on the Fachhochschule system of Germany. Programs have a duration of two or three years and require a high school degree for access.

The Institutes of "Istruzione e Formazione Tecnica Superiore" (abbreviated IFTS – Higher Technical Education and Training) are managed at Regional level and their duration varies between 800 and 1000 hours, of which usually almost half are dedicated to practice. IFTSs are equivalent to post-secondary vocational education. Programs have a duration of one year and require a high school degree for access. Each region, every year, can establish further requisites for access.

For what concerns sustainable fashion in Italy, the Manifesto of sustainability for fashion of 13 June 2012 promoted by the National Chamber of Italian Fashion established ten points with the aim of creating an "Italian way" to responsible and sustainable fashion and to encourage the adoption of responsible management models throughout the fashion value chain to the benefit of the country system. The ten points are reported in the Annexes.

3.1.2. Methodology

The main purpose of this study is to determine the current conditions, training programs and educational options (academic and VET) available in Italy that are connected to sustainable development and environmental protection in the fashion industry; to find trends, opportunities, and gaps in the relevant field. The research methodology was based on the desk research, including a review of previous research findings and similar documents (industry reports published online, publications and articles of the scholars) to get a broad understanding of the topic and collect the necessary data.

3.1.3. VET and academic educational offers in Italy

VET educational offers:

"New Sustainable Fashion" course¹

This is a short course organised by the Milan Fashion Institute, aiming at preparing graduate and graduating students, young managers, professionals and young entrepreneurs to deal with the complexity of responsibility in the fashion industry by providing concrete tools and sharing inspiring business practices. The course aims at sharing with the participants the most updated information and interesting examples on innovative business models in fashion & luxury. The course focuses on the driver of sustainability for the creation of shared value. For them, creating shared value in fashion means being able to answer the needs of many stakeholders: the environment, society, institutions, art, culture, territory and the consumers.

The short course aims at:

- Preparing the participants to deal with the complexity of responsibility in the fashion industry;
- Providing concrete tools to learn how and where to select innovative fibres in fashion, how to build an ingredient branding strategy in sustainability how to create and apply some good

¹ <u>https://www.milanofashioninstitute.com/en/courses/new-sustainable-fashion/</u>





responsibility guidelines, how to structure a good sustainability report, how to struct good business plan in sustainable fashion;

- Sharing inspiring business practices in both mass market, premium and luxury segment, for the different business models

The teaching model is composed as follows:

- In classroom lectures
- Case studies
- Company visits
- Project works
- Sessions of Career orientation and/or reviews on business ideas.

Duration: 4 weeks, 120 hours.

"Management of the Sustainable Fashion Supply Chain" - Advanced Training Course²

The course will show participants the concepts and tools suitable for rethinking and managing the business processes and strategies of companies in the fashion supply chain in a sustainable way. It will be a up-to-date training course and will touch on issues considered increasingly fundamental and required by the fashion industries, such as the assessment of the environmental impact of production processes, compliance with the new dictates of the circular economy, knowledge of sustainable materials and new sustainable business models, certifications and traceability of products. Given that consumers are increasingly aware of the importance of environmental issues and are very critical of companies in the fashion supply chain that ignore sustainable aspects, this course has been designed to meet these needs and the strong demand from companies for managers of the sustainable fashion supply chain.

Duration: 120 hours

"Out of Fashion" – Advanced Training course³

Out of Fashion is an advanced training course on Sustainability in fashion with the aim of building an overall vision and a systemic approach to the priorities and problems present today in the textile and clothing sectors. Starting from the observation of the great changes taking place - the general reduction in consumption, the leap forward of e-commerce, the new European regulations - new strategies and visions will be proposed in the various modules that define the Out of Fashion training project, in order to transform and relaunch the fashion system starting from the Made in Italy vocation for quality. The course is aimed at professionals, executives, emerging entrepreneurs and young workers in the sectors of fashion, textiles, accessories, retail from functional areas related to product development, design, fashion design, technical design, public relations, marketing, e-commerce and communication. Out of Fashion is also open to students and recent graduates who are highly motivated to study sustainability issues in their educational path. The goal of Out of Fashion is the training of key figures who intend to bring the culture of sustainability into their work environments, an indispensable element for relaunching the textile, fashion and clothing sector in the markets of the future.

Out of Fashion offers a systemic and 360-degree vision on the theme of sustainability in fashion, addressed in all its many aspects: new business models, fibres, organic and synthetic materials and environmental sustainability, technological innovations, traceability of the supply chain, responsibility for business and workers' rights, communication and relationship with the consumer, successful case histories. Sustainability plays a key role in this path: transparency and traceability of

² <u>https://www.pin.unifi.it/pinews/889-management-della-filiera-moda-sostenibile</u>

https://www.polidesign.net/it/formazione/fashion-design/corso--out-of-fashion/#:~:text=Out%20of%20Fashion%20%C3%A8%20un,del%20tessile%20e%20dell'abbigliamento.





the supply chain, innovation of business models in a circular logic, innovative research in the ti field, biomimicry applied to materials, technology applied to recycling and 'upcycling, reshoring, the enhancement of the manufacturing tradition of the territory are content values intended to renew the old production systems, giving new impetus to a manufacturing sector capable of communicating with a new generation of consumers and intercepting their needs and desires.

Academic education offers

Master's in fashion direction: Product Sustainability Management at MILANO FASHION INSTITUTE $(MFI)^4$

In the PSM Master's, all knowledge, competences and analysis tools needed to define and to recognize a sustainable product-service system for a luxury Italian market are found. The aim of the Master's is to update and deepen tomorrow's managers what are the pillars inherent in the meanings of sustainability, the laws and regulations, the design approaches and the communication analysis tools so that it can lead the luxury fashion company to a greater awareness of its responsibility on the market. The program is organized into two pillars, which cover different sides of product management:

- **Fashion Pillars**: here, topics related to the fashion industry and management, business models and marketing. Didactical activities of introduction to the knowledge of the fashion industry, from its historical evolution and historical criticism, to the predominant organizational models, from the main products' typologies and the instruments necessary to explore and know the fashion market, and finally up to the techniques of project management.
- **Fashion Processes:** specialized courses on sustainable management, sustainable fashion, supply chains and CSR are taught. Educational activities aimed to the formation of specific competences in managing key processes identified by the three functional and professional areas of the Master's program are found.

The goal of the Master's is to provide the knowledge, skills and analytical tools necessary to the definition and recognition of a system-product-service system and sustainable process for luxury fashion. The course is completely in English.During the whole course an Italian - English bilingual Teaching Assistant is available for both Italian and foreign students. Duration of the Master's: 1 year, 60 credits, 1200 hours.

Sustainable Fashion Master's program at POLIMODA⁵

The Master's in Sustainable Fashion is an up-to-date program designed to shape Sustainability Managers, Circular Economy Managers and Fashion Diversity Managers.

Systems thinking, ethical fashion, circular business models and standards, eco-design, diversity and inclusion are the latest fashion buzzwords shining a light on some of the most critical themes of the contemporary worldwide agenda and are becoming increasingly accepted goals by fashion brands, luxury suppliers and non-profits. The course covers the following topics:

- Fashion culture
- Brand Management & Fashion Sustainability
- Sustainable Production
- Global economy

⁴ https://www.milanofashioninstitute.com/en/masters/psm/

⁵ https://www.polimoda.com/courses/master/sustainable-fashion





This intensive specialization program is run by resident teachers from the industry with the c involvement of international professionals. International guest lectures and two field trips to production sites are part of the program.

Second level Master's Degree in Fashion Sustainability & Industry Evolution⁶

The Academic Master's Degree in Fashion Sustainability and Industry Evolution, in partnership with Salvatore Ferragamo, Bonaudo and Project Officina Creativa, integrates cultural and design disciplines, examining the entire production cycle (Design, Production, Sales and Distribution, Defection, Return Goods – Shipping, Storage), the business models, legal areas, communication and scientific study areas that are in continuous evolution. In this context, the sociology of cultural processes and the history of fashion have a strong focus on sustainability, addressing it both in the contemporary social and communicative context and in recent history to analyse it concretely. The competence in the merit of materials, processes and production technologies includes international certifications that affect the various areas of the sector and the design part that analyses the system in its entirety and faces the challenge of the tangible application of the skills acquired.

Product culture, which is the basis of the concept of sustainability, is at the centre of the Master's degree which implements an approach to the system in its entirety since the solutions for complex problems involve skills ranging from environmental to social and economic factors. The main learning objective of this course is to design new professional figures aware of responsible innovation processes across the economic, environmental and social fields.

Topics covered in this course are:

- Sociology of cultural processes
- History of fashion
- Type of materials
- The culture of fashion materials
- Design system
- The design of professionalism

3.1.4. Good practices in the Italian fashion and textile market

Italy has several companies and businesses that can be used as examples of good practices. Organisations investing in sustainable fashion are usually SMEs, which try to distinguish themselves from other competitors focusing on a differentiation strategy and on higher prices. These latter are also justified due to the high investments on innovative sustainable technologies SMEs have to undertake in order to develop and implement green practices.

Orange Fiber⁷

Orange Fiber is an Italian company that has patented and manufactures sustainable fabrics for fashion from citrus juice by-products. Following a collaboration with Politecnico di Milano University, it has been developed with an innovative process that allows turning virtually more than 700,000 tonnes of by-product that the citrus processing industry produces every year in Italy into a high-quality fabric that can respond to the need for sustainability and innovation of fashion brands. The citrus peel would otherwise have to be disposed of, with costs for both the processing industry and the environment. They patented the process in Italy in 2013, and extended it to an International Patent Cooperation Treaty the following year.

⁶ https://www.accademiacostumeemoda.it/en/programmes/fashion-sustainability-e-industry-innovation/

⁷ <u>https://orangefiber.it/</u>





Sustainability and innovation, combined with the Made in Italy sign of quality, distinguish the properties and make the company a reference for fashion players that cares about both environmental protection and exclusivity.

In 2015, Orange Fiber was selected among more than 2,700 projects from 112 different countries and awarded it with a grant of €150,000 and a year of innovation accelerating, provided by the H&M Foundation in collaboration with Accenture and the KTH Royal Institute of Technology in Stockholm. Orange Fiber has won a multitude of awards during the las couple of years, including Global Change Award, Elle Impact 2 For Women Award Italia, the EIB Institute's Social Innovation Tournament (finalist), Mass Challenge Switzerland, Fashion for Good Accelerator program, MF supply Chain Awards, Green Carpet Fashion Awards, and Ideas for Change Award. In 2020 the Royal Foundation of the Duke and Duchess of Cambridge has named Orange Fiber as an official nominator for the Earthshot Prize, the most ambitious and prestigious global environment prize in history to incentivize change and help to heal our planet over the next 10 years.

Despite awards, the company has collaborated with the world known brands, such as Salvatore Ferragamo; H&M Conscious Exclusive Collection in April 2019 (a premium H&M collection composed entirely of recycled and sustainable materials); E.Marinella, and also with Lenzing group - a global leader in the production of wood-based specialized fibers.

RifoLab⁸

Rifò wants to combine circular economy, craftsmanship and sustainable fashion. Rifò makes high quality garments and accessories, using recycled and recyclable textile fibres. They transform old clothes into a new yarn that is then used to create new products.

"Rifò" comes from the Tuscan dialect and it means "redoing": a 0 km name for a local clothing production that takes up the tradition of textile upcycling. They chose this local name because it represents the locals and the way of speaking of the artisans who invented the recycling method of old clothes more than a hundred years ago: the so-called "Cenciaioli".

Furthermore, Rifò means in italian "doing again" because they "rebuild" a traditional craft that was disappearing in recent years.

RE49-Reborn shoes⁹

RE49 reuses abandoned military uniforms, fabrics, beach umbrellas, beach deckchairs and sails to create shoes. RE49 is the most sustainable shoe brand in the world, producing unique Made in Italy products, according to the circular economy model.

RE49 believes in the infinite capacity to reinvent itself and the world. Its mission is to protect the planet and shape a better future for the next generations. Which is why, in 2021, from a traditional leather shoe production, they completely redefined their business and are now producing shoes with recycled, recovered, animal-free, vegan materials. Their shoes are made in Italy and produced according to the circular economy model, with recycled waste materials that would otherwise be disposed of in landfills sites. Thus, their production cycle is closed, because materials that already exist are transformed into shoes. Materials are recycled and infinitely reused, waste and emissions are reduced. Thus, they promote a slower economy that uses resources efficiently and values social and environmental issues.

3.1.5. Financing opportunities in Italy

⁸ <u>https://rifo-lab.com/en</u>

⁹ https://www.re49.it/en





Intesa SanPaolo¹⁰

To boost and support Green Economy, Intesa Sanpaolo has developed a wide and diversified ofter or financing and consulting products, dedicated to all types of customers, in Italy and abroad.

In 2021, loans to the Green and Circular Economy more than tripled compared to 2020, reaching 8.7 billion euro (11.2% of the total Group loans), 5.5 billion euro of which from the Circular economy credit plafond.

Intesa Sanpaolo Group promotes the spread of the model, drawing on the support of the Ellen MacArthur Foundation, the main promoter of the global transition towards the Circular Economy. The collaboration with the Foundation, of which Intesa Sanpaolo is now Strategic Partner, continues through a three-year agreement 2022-2024.

Support has been provided, among others, for numerous company projects for activities such as the replacement of critical and fossil fuel materials with recycled or organic materials, the reuse of urban organic waste for the production of biomethane and compost and the recovery of CO2, the revamping of renewable energy plants with the extension of their lifetimes and the increase in their production capacity, and the recovery of industrial waste for its reuse in new product lines.

STAND Up! - Sustainable Textile Action for Networking and Development of circular economy business ventures in the Mediterranean¹¹

STAND UP! intends to support textile entrepreneurs and eco-innovative ventures in 5 countries (Spain, Lebanon, Egypt, Tunisia, Italy) and help them seize the business opportunities that the green evolution will generate. To achieve this ambitious goal, the project will undertake many actions in training, financial grants, market stimulation, technology transfer, IPR protection, etc. As a result, the SMEs of the textile and clothing sector will be more competitive and, at aggregate level, the value chain will be strengthened, and new Mediterranean cross-border linkages established. Expected achievements:

- 400 ideation stage entrepreneurs trained (at least 50% women and young people)

- Soft-landing voucher scheme of up to €9,000 granted to 50 early and growth stage entrepreneurs

- Eco-innovation voucher scheme granted to 20 entrepreneurs to fund technology, product and service innovations

- Prizes worth €50,000 awarded for solutions to textile manufacturing and clothing industry

Non Repayable contributions for sustainable fashion¹²

This measure consists in non-repayable grants for small businesses operating in the textile, fashion and accessories industries. The main purpose is to support small businesses based in Italy which invest in design and creation, as well as to promote young talents in the textile, fashion and accessories sector. The initiative is intended to enhance Italian productions with a high artistic and creative content, with a view to guaranteeing a fashion that is increasingly based on sustainability. The eligible projects are the ones aimed at:

- the creation of new design elements
- the introduction in the company of process innovations
- the creation and use of innovative fabrics
- the principles of the circular economy aimed at recycling used materials or the use of fabrics deriving from renewable sources
- the introduction of digital innovations into the company

¹⁰ https://group.intesasanpaolo.com/en/sustainability/support-to-esg-transition/loans-and-services-for-the-green-economy

¹¹ https://www.enicbcmed.eu/projects/stand-up

¹² https://www.mise.gov.it/images/stories/normativa/DM_18_dicembre_2020_TMA.pdf





The facilitation consists in the disbursement of non-repayable grants up to a maximum of 5(eligible expenses, up to a limit of five million euros.

3.1.6. Conclusions and identifying the gaps in Italy

Italy can be considered as a good European example for what concerns the number and the quality of VET and HE initiatives aimed at promoting a greener fashion industry, as well as the funding opportunities aimed at fostering sustainability in different sectors, including the fashion one. Most of the educational programs are on the paid basis, without support in finding an internship/work in the program. So education without any guarantees of being employed in the sector of interest. Some of the universities request a very high payment for the study course. It would be great if the universities/other organisations that provide education on the discussed topic, could also offer real job/internship opportunities.

For what concerns educational initiatives aimed at developing knowledge and competences related to green fashion, most of them – including the most important and well-known ones – are VET courses. On the contrary, fewer initiatives are included in academic education paths. Therefore, it would be useful if education to a more sustainable fashion was included in educational curricula from earlier phases of HE. This would be useful in order to sensitise to a more sustainable fashion industry even those who don't undertake such a specialised and long educational path. At least, it would be useful that some subjects and insights related to sustainability were inserted in more "general" fashion courses, in the case that organising a HE course entirely based on sustainability is too specific. The universities should consider close cooperation with the companies, sector and employer representatives, regional governments, as well as regional innovation agencies, that specialise in sustainability-related issues to develop a common agenda for the students for their employment after graduation. When it comes to VET education, the employability and entrepreneurial readiness of VET students should be enhanced, preparing and connecting them to the labour market. Moreover, technical, pedagogical and didactic VET programs should be adapted to the upcoming environmental, social and economic challenges.

For what concerns funding opportunities for implementing green and sustainable initiatives, they are considered as really appropriate in the Italian entrepreneurial framework, since the great majority of the organisations investing in sustainable practices are micro, small and medium enterprises. For their intrinsic characteristics, these latter cannot afford to make relevant investments in sustainable practices. This is also due to the fact that green practices are obtained thanks to very innovative technologies, which in turn require a great amount of research, time, effort and then, of course, of economic investment. From here, it emerges the great utility of any educational initiative/training course presenting the current best practices and inspiring initiatives concerning sustainability in the fashion industry, in order to give learners and experts in this field the possibility of deepening their knowledge and competencies without huge investments.

When it comes to finding a job, because the sustainability sector is so broad, a person may find it challenging to find a niche. Networking is a great way to get inspired and discover new areas of interest. So, the universities might initiate to create professional networks on sustainability with the focus on young professionals.

3.1.7. Other information





ITALIAN SPECIAL FASHION EVENTS:

• Green Carpet Fashion Awards¹³ – a venue, where new sustainable brands can attain good visibility.

The Green Carpet Fashion Awards, Italia, celebrates the best in sustainable fashion. The awards reflect the commitment of fashion houses to sustainability, as they work to embrace rapid change while preserving the heritage and authenticity of small-scale producers.

Talents are selected for the Green Carpet Fashion Awards through a competition with fairly rigid admission criteria; the final choice among the 8 selected talents is made by a jury. The applying fashion designer must be independent or have a small company.

The Green Carpet Fashion Awards (GCFA) was launched by Eco-Age in Milan in 2017 in collaboration with Camera Nazionale della Moda Italiana (CNMI). It is also supported by the Italian Ministry of Foreign Affairs and International Cooperation and by the Italian Trade Agency (ITA).

Dubbed the 'Oscars of Fashion', the GCFAs are one of the world's foremost sustainability and fashion awards, adding glamour and celebrity to sustainability issues in a true Oscars ceremony style. Held every year at La Scala theatre in Milan, they are the only awards ceremony to honour both the handprint of fashion (the human capital that goes into the making of fashion), as well as to acknowledge the footprint (the natural capital and environmental impact) of fashion at this level.

• **Vogue YOOX Challenge** ¹⁴- The Future of Responsible Fashion". The project is run by Vogue Italia and YOOX in support of designers, creatives and start-ups which, through innovative projects, have bravely decided to invest in a responsible, sustainable approach to fashion and design.

• **The Milano Fashion Week**¹⁵ is under the responsibility of the Italian National Fashion Chamber (Camera Nazionale della Moda Italiana, or Camera Moda).

The latest edition of Milan Fashion Week, held on September 22-27, 2021 and presenting mostly women's collections for spring/summer 2022, was the first one that occurred through a series of physical events after the pandemic has slowed down. Within this new happening, it also hosted a series of projects and collections focused on sustainability, while raising consciousness on environmental issues and discovering new alternative technology approaches.

ITALIAN FAIRS:

• Milano Unica ¹⁶

Milano Unica, the new international textile fair organized in Italy, has been created through vast experience, fine quality and tradition of five prestigious Italian trade shows, Ideabiella, Ideacomo, Moda In, Prato Expo and Shirt Avenue.

This composed project is held twice a year (February-September), presenting the finest quality products from both Italian and European textile manufacturers.

Milano Unica created the Sustainability project_precisely to promote and valorize companies following this type of path and, above all, to demonstrate concretely that sustainability values are no longer to be considered apart from those of creativity and style, but one and the same.

https://eco-age.com/agency/events/green-carpet-fashion-awards/

¹⁵ <u>https://www.the-spin-off.com/news/stories/The-Shows-Milan-Fashion-Week-16102</u>

¹³ https://www.cameramoda.it/en/green-carpet-fashion-awards-italia/2020/

¹⁴https://www.yoox.com/it/project/vogueyooxchallenge?tp=101385&utm_campaign=op_2116208&utm_source=rakuten&utm_medium=a ffiliation-rs&ranMID=40584&ranEAID=TnL5HPStwNw&ranSiteID=TnL5HPStwNw-uezIV7C_0UUOSIdZPW5QjA

¹⁶ https://www.milanounica.it/en





• FILO¹⁷

An international yarns and fibers b2b fair, FILO 2022 takes place in Milan twice a year. The event aims to highlight the field of yarns and products from Italian and worldwide companies. Not only offering the opportunity for buyers and exhibitors to meet, tackling topics like sustainability and innovation. Now in its 57th edition, during the years, the event evolved into a business platform. More than a fair, becoming a point of reference for the yarn industry; as the result of research and innovation, produced with an eye on ethical production.

 White Milano¹⁸ is the tradeshow of reference for international womenswear in the heart of Tortona Fashion District. Key omnichannel platform for fashion operators, able to meet, season after season, international market's needs. The only "hub" of innovative projects offering a careful selection of cutting-edge sustainable brands, established maisons, experimenting designers and new generation start-ups.

A pioneering approach to sustainability among White's objectives from the very start.

Back in 2000, fair's first year, the usage of low environmental impact and zero waste fittings were implemented, minimizing logistics, first cause of global pollution, thanks to a 0 Km logistics system.WHITE's commitment to the revolution of a 360-degree ethical fashion system invests important resources, to guarantee the controlled use of materials, respect for the work, the individual and his work environment, up to the careful selection of brands 100 % sustainable. An Expo with an area dedicated to producers of raw materials truly engaged in a concrete revolution in the fashion system, through advanced production criteria for the environment.

WHITE DESIGN: the revolutionary initiative that turns the spotlight on the theme of recycling, to dress salons with recycled fabrics and materials and natural dyes.

On top of this 360-degree vision is WSM White Sustainable Milan, an internationally recognized event that is part of WHITE's integrated communication project to raise consumer awareness of the high environmental and individual impact caused by the massive production of low-cost chains.

The companies exhibiting at WHITE respect the main criteria established by the UN, a reference point for a scrupulous selection of names that represent the canons of the fashion system and new generation fashion trends.

UNIVERSITY NETWORK

The RUS - University Network for Sustainable Development ¹⁹

The main goal of RUS (Network for Sustainable Universities) is to spread the culture of sustainability, both within and outside the Universities (at urban, regional, national, international level), with the aim of increasing the positive impact in terms of environmental, ethical, social and economic actions which are currently implemented by members of the Network, furthering the recognisability and the value of the Italian experience on an International level.

It is the first experience of coordination and sharing between all Italian universities committed to the topic of environmental sustainability and social responsibility.

¹⁷ https://filo.it/en/

¹⁸ https://www.whiteshow.com/en/about

¹⁹ https://reterus.it/





Manifesto of sustainability for fashion of 13 June 2012 promoted by the National Chamber of Italian Fashion:

- 1. Design quality products that can last a long time and minimise the impact on ecosystems
- 2. Use materials and fabrics with a high environmental and social value
- 3. Processing of raw materials and production: reduce the environmental and social impacts of the activities and recognize the contribution of everyone to the value of the product
- 4. Distribution, marketing and sales: include sustainability criteria throughout your product's journey to the customer
- 5. Management systems: be committed to continuous improvement of business performance
- 6. Support the territory and the Made in Italy
- 7. Business Ethics: integrate universal values into your brand
- 8. Communicate your commitment to sustainability to stakeholders in a transparent way
- 9. Education: Promote ethics and sustainability to consumers and all other stakeholders

3.2. Germany

3.2.1. General Introduction

The education system consists of five major educational areas:

- 1. Non-compulsory elementary sector (kindergarten, day care),
- 2. Primary level (elementary school: grades 1-4),

3./4. **secondary level I and II** with different school types (Hauptschule, Realschule, Gesamtschule and Gymnasium) and vocational training in the dual system.

5. **Tertiary education** (universities, universities of applied sciences and other types of higher education leading to an academic degree).

Another area is continuing education after entering the workforce, the so-called **quaternary area**. This includes, for example, vocational training and upgrading qualifications (e.g., at Volkshochschulen).

The Federal Government of Germany is committed to a sustainable fashion and textile industry at various levels and with various measures. These are, for example, the state textile seal "Grüner Knopf" (Green Button) with demanding social and environmental standards, the active design of measures through the "Bündnis für nachhaltige Textilien" (Alliance for Sustainable Textiles), the support of international organizations, e.g. through the UN Development Program (UNDP) or the International Labor Organization (ILO) and various cooperations with the German economy and cooperation with civil society or consumers.

3.2.2. Methodology

The brief study gives an overview of educational offers, good practices and financing opportunities of sustainability in the fashion industry for Germany. The research is based on desk research to capture the current state of knowledge.

3.2.3. VET and academic educational offers in Germany

There are only a few courses in Germany of study and VET offers that specialize in sustainability in the fashion sector.





VET educational offers

Sustainability and textile technology²⁰

This seminar provides a basic understanding of sustainability in the textile industry with an overview of the current state of the art. The seminar facilitates the evaluation of recycling opportunities, provides technical vocabulary, and gives inspiration for corporate sustainability. It covers topics like sustainability in the clothing and textile industry, properties of biopolymers and recycling of textiles. Duration: 1 day

Circular value chains, their assessment and sustainable design²¹

In this seminar, the complexity of value chains is conveyed. Thus, the participants open up the relevance of design decisions along the entire value chain in terms of nature and resource consumption, circularity and emissions. Different strategies of sustainable production and consumption (circular design, efficiency, consistency, sufficiency, etc.) as well as their conditions and limits will be examined and related to the work of designers. The course also conveys the relevance of the choice of materials and manufacturing processes and their significance for a circular value creation.

The seminar work is accompanied by specialist readings, individual and group exercises, preparation and follow-up. Participants apply the skills they have learned in the context of a case study by analyzing a concrete product or service on the basis of the criteria they have developed. The 30-hour seminar is consistently dialogue-oriented and combines input, discussions, practical exercises and guided reading in a varied way.

Duration: 6 months (in total 30 hours)

Academic education offers:

Sustainable Fashion (B.A.) at the Business & Law School in Berlin²²:

The bachelor's program Sustainable Fashion develops sustainable solutions on a design, theoretical and organizational basis. In addition to the basic study of design in the subjects Design and Visualization, Design Drawing or Collection Development, theoretical-ethical and management-oriented competencies are developed in the modules Sustainability in Supply Chain Management, Brand Management or international Product and Quality Management. Some of the topics covered in this program are the following:

- Design fundamentals
- Digital design techniques
- Sustainability in the textile chain
- Fashion theory and history
- Pattern drafting and garment construction
- Supply chain management
- Fashion ethics

Duration: 3 years

Sustainability in Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin²³:

²⁰ https://dcc-aachen.de/de/nachhaltigkeit-textiltechnik/

https://www.ecosign.de/de/weiterbildung/weiterbildung-nachhaltiges-design.php#anchor_0a31c493_Accordion-2-2.-Zirkulaere-Wertscho epfungsketten--deren-Assessment-und-Nachhaltiges-Design

²² <u>https://www.fakultaet-creative-business.de/sustainable-fashion/</u> 23

https://www.amdnet.de/en/degree-programs/sustainability-in-fashion-and-creative-industries-education-master/?crmid=bBcAAadOcBaBa Cda





With an interdisciplinary structure, the master covers sustainable design strategies and various c areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing instruments, to arrange value-added chains in an ecological and social manner, the functioning of ecosystems, the origin of resources, and fair labor conditions are included.²⁴ The pillars identified within this course are:

- Sustainable design strategies
- Sustainable business
- Sustainable production

These three pillars are the main focus of the study, with every semester having the same main pillars, but more detailed and specialized topics as the student gains proficiency. The program is a full-time on-site master's degree for students who wish to specialize in the field of sustainability. <u>Duration: 1,5 years</u>

Sustainable Textiles (M.Eng.) at Hof Hochschule in Münchberg²⁵:

The Master's provides students with all the skills needed to develop and commission (more sustainable) processes in textile chemistry. Solutions for non-hazardous alternative chemicals are developed and production processes are optimized. Research is also conducted on innovative finishing processes and materials. Students will learn topics about advanced textile production and technology, management and international law and advanced circular, sustainable products. There is also the option of elective courses²⁶.

Duration: 1,5 years

3.2.4. Good practices in the German fashion and textile market

ArmedAngels²⁷:

ArmedAngels is a sustainable and fair trade clothing fashion brand. The founders from Cologne advertise with timeless design, sustainable materials and fair production conditions. The label deliberately chooses not to follow every trend, to set an example against fast fashion, therefore focus on slow fashion.

In addition, they are always working with new innovative approaches to become even more sustainable. Currently, for example, with the Circularity.ID. The so called tees from circularity.ID[®] are sewn with a NFC-tag in the sleeve. The customer can then scan them with his smartphone and he receives, among other things, information about producers and material. In addition, they can use the tee to return the garment to the cycle via the ArmedAngels take-back system.

Vaude²⁸:

Vaude works as an outdoor clothing and product manufacturer both in the company headquarters, as well as in each individual product climate neutral. The company pays attention to high-quality and sustainable materials. It also tries to extend the life cycle of the articles and thus conserve resources. Therefore, regardless of complaints, a repair service is offered for all products. For smaller repairs, there is also support on the website through simply explained "do-it-yourself" repair instructions and care instructions for each product.

MOOT (Made out of trash)²⁹:

²⁴ https://images.amdnet.de/www.amdnet.de/uploads/Curriculum_SCI-2.pdf

²⁵ https://www.hof-university.de/studieninteressierte/studienangebot/sustainable-textiles-meng.html

²⁶ https://www.hof-university.de/studieninteressierte/studienangebot/sustainable-textiles-meng/modulhandbuch.html

²⁷ https://www.armedangels.com/de-de/mission/circularity/circular-id

²⁸ https://help.vaude.com/wie-kann-ich-ein-produkt-zur-reparatur-einsenden/

²⁹ <u>https://drive.google.com/file/d/1CBS7XS1LjumiQ8_RcEL11M-eAuXGh2Vr/view</u>





The Berlin-based fashion label MOOT (Made out of trash) manufactures new clothing from disca textile donations and thus avoids unnecessary textile waste. MOOT wants to change the attitude towards clothing fundamentally and in the long term. Clothing is not a disposable, throw-away product, but rather a consumer good. The label wants to raise awareness for ethical consumption and to value the work of all those involved in the production process again - by fair and environmentally conscious production. Materials and fabrics such as discarded jersey bedding and wool blankets, upcycled coconut shells or discarded stretch goods from shipping companies are used. The label thinks sustainability throughout the process and has decided against free return shipping. The label wants customers to consciously engage with the products before they buy them, to keep the return rate as low as possible.

3.2.5. Financing opportunities in Germany

BonVenture³⁰:

BonVenture is the first provider of social venture capital in the German-speaking world. It invests in companies that create social value with their work. The founders of social start-ups are financed with capital starting at 500,000 euros and also supported with know-how and a broad network.

Fase³¹:

Fase is a provider of financing models based on debt, mezzanine or private capital. The provider assists in raising repayable capital in the amount of 500,000 to 5 million euros and supports companies throughout the process.

Federal Ecodesign Award³²:

The German Federal Ministry for the Environment therefore offered the Federal Ecodesign Award for the first time in 2012, which has become the leading German prize for sustainable design. The Federal Ecodesign Award honors sustainable and outstandingly designed products, services and concepts. Every year, several hundred submissions - always including numerous exhibits from innovative model labels - testify to a rethinking in parts of the industry. The prize money is 1,000 euros.

3.2.6. Conclusion and identifying the gaps in Germany

Although around 1,000 students per year have enrolled at the more than 40 fashion colleges/universities in Germany in recent years³³, many of them will not have taken specific courses on sustainability in the fashion industry. There are hardly any entire courses of study on sustainable fashion. And also hardly any providers on the market for continuing education that offer seminars/events on sustainability promotion in the fashion industry.

Germany is very much at the forefront of the world market for technical textiles and technical fibers. There could be more (government) support here to make this sector much more sustainable.

Stronger cooperation within the industry could promote growth in this area. The focus here should be on interdisciplinary exchange. Possible solutions would include the creation of a digital "excellence platform" where companies from different areas of the fashion industry can meet and exchange ideas.

³⁰ https://bonventure.de/sozialunternehmen/

³¹ <u>https://fa-se.de/sozialunternehmen/</u>

³² https://www.bundespreis-ecodesign.de/de/gewinner?search=&filter=Preistr%C3%A4ger,Produkt&year=

³³ https://www.bmwk.de/Redaktion/DE/Downloads/Studien/status-deutscher-mode-2021.pdf?__blob=publicationFile





Seminars and training courses could also be placed here to promote the training and further education of sustainability skills and current research on the topic in the fashion industry.

3.3. Romania

3.3.1. General introduction

The Romanian educational system has an open (allows pupils to transfer to a different school, class, pathway) and pluralistic character (allows schools to be public, private or confessional, and provides schooling methods in Romanian or other foreign languages). General mandatory education includes primary (ISCED1), lower secondary (ISCED 2) and 2 years of the upper secondary levels (ISCED3), in total 11 years of schooling. An international Baccalaureate diploma is received when finishing the upper secondary cycle, upon official examination.³⁴ However, the target group of concern in this project are from ISCED3 graduates and higher (ISCED 3-7 – tertiary non-university education, bachelor's and master's student/graduates). In the last decade, interest for professional schools has dropped significantly – directly proportionate to the rising interest towards higher education. However, the educational approach in Romanian Universities is highly theoretical, creating a gap between the skills the graduates obtain and the practical skills needed in the field. In this regard, in the last years, investments have been made into encouraging tertiary non-university education (through dual schools), as well as recognition and certification of vocational education and life-long learning programmes.

There are currently 184.500 fashion and textile companies in Romania, with a yearly revenue of €164 billion.³⁵ The textile industry is a long-standing traditional industry of the country, which has seen a powerful development before the 1990s and entering a state of perpetual decline ever since, mostly due to the major economic restructuring of the country following the decline of the communist regime in all industrial sectors. During the communist period, Romanian industry reached a peak point, however, the downfall of the regime brought about many disturbances in this aspect, where many companies were left with outdated technologies and unsupervised, causing a majority of them to call bankruptcy and severely damaging the Romanian industry until the present day. Only a few have managed to become privatised, either through foreign investors or through selling shares to the management - out of which only a few have managed to stay in business until today. This situation, of course, also applies to the fashion and textile sector – with a decline from 25% of the export quota being textiles in 1992 to 6% in 2018³⁶. The COVID-19 pandemic also had a major impact on this industry, actually being one of the most affected industries of the country, suffering a loss of approximately 35% of revenue in the second semester of 2020. The Romanian textile and apparel sector export contributions in 2022 are of \$4.8 Million worth, while imports are worth around \$6 Million. The countries where the most imports are coming from are Italy, Germany and Turkey; while most exports are going to Italy, Germany and United Kingdom³⁷.

As for fashion and textile-related waste, the law and infrastructure are very poor in supporting recycling – only having one textile recycling facility in the whole country. Legislation doesn't oblige any producers to recycle any textile waste until 2025. There are separate textile collection points in every city, however, very few of these items actually end up being recycled. They are usually donated (if their conditions allow it), incinerated, or simply landfilled³⁸.

- ³⁵ https://s4tclfblueprint.eu/wp-content/uploads/2021/02/brochure-romania.pdf
- ³⁶ file:///Users/macbookpro/Downloads/RA20Caseta%205.pdf
- ³⁷ https://www.textileinfomedia.com/textile-industry-in-romania#Top10RomaniaTextileExporter
- https://ecoteca.ro/situatia-deseurilor-textile-in-romania-in-ce-stadiu-suntem-si-ce-mai-e-de-facut-ce-actiuni-pot-adopta-consumatorii.html

³⁴https://eacea.ec.europa.eu/national-policies/eurydice/content/romania_en





On another hand, this situation has an effect on the collective mentality towards used clothing, a donating and purchasing second hand is a very common practice. Clothing is usually reused until no longer usable rather than thrown away directly. According to a survey performed in 2022 with 194 respondents in Romania³⁹, 54% of consumers wear an item of clothing at least 3 years or more and 57% of respondents stated that they donate items they no longer want, while only 9% throw them to the trash.

3.3.2. Methodology

The research performed for the state of the art analysis in the country Romania consisted of qualitative desk research, by consultation of online resources, government documents, specialty reports and university curriculums.

3.3.3. VET and academic educational offers in Romania

VET educational offers

The vocational education landscape in the field of fashion and textiles has a number of possibilities for those interested. Led by "Gheorghe Asachi" Technical University of lasi, many VET projects in the field of sustainable textiles, sustainable production of fur, footwear and leather, sustainable fashion entrepreneurship and cross-sectoral collaboration have been elaborated. This University is definitely leading the field of sustainable development in fashion and textiles with 49 funded (Erasmus Plus, Horizon and other grants) projects in the field. These projects are clearly addressed to people initiated in the industry, that have technical textile development knowledge (usually their own students and alumni)⁴⁰.

On another hand, there are plenty of opportunities to learn fashion design, pattern-making and styling in most cities. There are many private institutions that offer certified courses in these topics, however, none of them focus on the sustainability aspect.

"Salomeia Truta" Fashion Institute⁴¹

This institute is a professional vocational fashion school, that provides more training paths for aspiring designers to choose, depending on their interest. They offer courses about technical pattern making, about fashion design and styling. They place a strong focus on practical work and provide accredited diplomas that are recognized internationally to their graduates. There is very little focus on sustainability, and a lot of focus on the creative aspects of fashion design and garment creation. This type of vocational institution is popular among aspiring Romanian designers that do not have time to commit to an academic path. The working style is very practical and applied, focused on the individual's ideas and creativity to develop final products. The Institute of Fashion offers comprehensive, qualified courses into all the topics relevant for a fashion designer, tailor or stylist. Some of the courses also include lessons about the types of fabrics and fibers, therefore providing a more general understanding of materials to the students. As for pattern making, they have an innovative approach to this by teaching their students to work from scratch to their own measurements, rather than use pre-set templates, which offers them deeper understanding and flexibility. On another hand, the innovative approach also consists of teaching students to use the Gemeni CAD program for digital pattern making.

⁴⁰ https://dima.tuiasi.ro/proiecte-cu-finantare-internationala/

³⁹<u>https://www.academia.edu/82742022/The effect of emotional value generated by digital clothing customization on the consume</u> r attitude towards slow sustainable fashion

⁴¹ http://institutuldemoda.ro/





Innovative design practices for achieving a new textile circular sector-Design4Circle⁴²:

Design4Circle seeks to bridge European designers' skill gaps in eco-innovation in clothing and texure items through a digital learning platform. Design4Circle will enable textile designers to decrease environmental effect during the product's life cycle while also developing new and creative companies based on circular economy ideas. The goal of the project is to develop an innovative learning curriculum aligned with the demands of textile and fashion designers toward a circular business model, with the primary target audience being existing and future textile designers.

It not only contains the theory divided in 7 chapters that include all areas of the lifecycle and production of textiles, but also informs the students about the latest innovations and developments in the field and offers lessons about the management of a business in the field. The course is highly detailed and technically-oriented, and it's structured in the following way:

- Module 1 Introduction to circular economy
- Module 2 Sustainability challenges in the textile and fashion industry
- Module 3: Materials For A Circular Economy
- Module 4: Design For A Circular Economy
- Module 5: Manufacture for a Circular Economy
- Module 6: Recycling Technologies For A Circular Economy
- Module 7: Business Management In A Circular Economy

Circular Economy Innovative Skills in the Textile Sector – ECO TEX⁴³:

The ultimate goal of the ECO TEX project is to create and deploy an innovative and comprehensive training toolset. The platform is focused on online training and allows information diffusion and experience exchange. Furthermore, it acts as a conduit for all stakeholders in the sector to exchange concerns and recommendations, as well as to promote job possibilities. This course addresses the managerial and corporate responsibility side of textile production, however, with a very strong sustainability focus. They explain circular economy practices, sustainability assessments, environmental performance and circular business models. The course approaches these aspects from the point of view of a business rather than an individual designer/technician. It addresses already developed professionals in the field with degrees in Environmental Policy, Law, Business or Public Administration, Engineering, Textile Engineering; especially in a managerial position.

The course is structured in four modules covering the following topics:

- Module 1: Sustainability management
- Module 2: Environmental Performance
- Module 3: Corporate Social Responsibility
- Module 4: Circular Economy

Higher education opportunities:

The options for Higher Education in the fashion and textile sector are vast, with 26 programs with different specializations and focus ranging from fashion and textile design, to knitting technologies, textile eco-finishing, textile engineering, leather works and footwear, chemical textile technology, innovative clothing production systems and so on. The faculties are spread throughout the entire country in 10 Universities in major cities like Bucharest, Timisoara, Cluj and Iasi.

"Aurel Vlaicu" University, Arad – Fashion Design Bachelor's:

In this program, the designer works on a project both stylistically and technically, they will think of the clothing product as a three-dimensional space belonging to the physical body, as an object

⁴² <u>https://design4circle.eu/</u>

⁴³ http://www.ecotexerasmus.eu/





characterized by functions of use, while integrating symbolic and cultural values into the product Graduates of the "Fashion-Clothing Design" major are considered to be specialists in clothing design. They will be able to work in different phases within a research project, such as developing and defining the lines and trends of a collection, technical product development, through to product management. This specialist can also work in the visual communication of the clothing product, both through traditional design techniques and digital techniques. This University provides the opportunity for the student to learn about sustainable fashion through a specialty optional eco-design discipline. They also teach students about the latest innovations in the field during the specialty technologies course, as well as preparing them for the future developments of the design sector by teaching 3D modelling throughout the whole 3 years of study. <u>Duration: 3 years</u>

"Gheorghe Asachi" Technical University of Iasi -Clothing design and modeling Master's:

Graduation from this master's degree will attest to superior training in the field of clothing design, which will allow to join a team working in this branch of the textile industry. The knowledge acquired will provide an effective response to the technical challenges posed by the rapid pace of change imposed by fashion and market requirements. This program is focused on the technical aspect of clothing production. It includes mastering 3D modelling programs (which are a technology for the future of sustainable fashion), as well as entire compulsory courses about the clothing lifecycle steps and sustainable fashion production techniques. Students get a full understanding of the production processes, the impact of the designing stage, optimal design techniques and textile manufacturing – essentially a clothing engineer training. Some of the courses offered include:

- Functional structuring of products
- Constructive design of clothing
- CAD systems for textile manufacturing
- Quality certification in garments
- Project management
- Clothing lifecycle
- Sustainability in fashion

Duration: 2 years

"Gheorghe Asachi" Technical University of Iasi - Eco-design in Textile Finishing Master's:

Eco design is a new movement that aims to develop textile products and technology that are beneficial to the environment. It promotes an environmentally conscious way of living. The core of this urgently required transformation in the sector is eco design in textile finishing. The development of creative, motivating, and high-performing technologies and materials gives rise to new concepts and advancements. Eco design is a new movement that aims to develop textile products and technology that are beneficial to the environment. It promotes an environmentally conscious way of living. The core of this urgently required transformation in the sector is eco design in textile finishing. The development of creative, motivating, and high-performing technologies and materials gives rise to new concepts and advancements. This is a textile engineering master's that has eco-design and sustainability at its core. They teach their students all about the engineering aspects of textile finishing and dyeing, as well as elements of design and all about how to make textile finishing more sustainable with the latest innovations. The competencies gained during this course include:

- create environmentally friendly textile technologies and products
- creation of innovative, inspiring and high performing technologies and materials
- change of the old technologies with new, non-polluting ones
- knowledge about all the latest sustainable textile materials: organically produced versions of commonly used textile fibres, sustainable artificial fibres or the very new synthetic fibres derived from renewable resources, such as Polylactic acid fibres





- responsible with systematic reduction of product's exposure to current and anticipated future environmental compliance risks and liabilities
- development of innovative sustainable technology products and systems
- exploit and harness of new smart technologies for new business developments and opportunities in the field of textiles

3.3.4. Good practices in the Romanian fashion and textile market

The sustainable fashion market in Romania is mostly sustained by SMEs founded by Romanian creators. There are many of these shops that promote sustainable, ethical and/or circular values, with different focuses depending on the vision of the founder themselves. However, due to the high price-point compared to fast-fashion brands, the customer pool is much smaller for sustainable fashion. Of course, apart from these actors, there are international initiatives like H&M Conscious and Levi's, or international brands that sell sustainable clothing like Stella McCartney, Patagonia and Sandqvist. According to a study performed in 2021, since the COVID-19 pandemic, interest for sustainable fashion has risen considerably across the Romanian fashion market, with 53% of brands saying that this is the strongest trend in the last period. According to the same study, 60% of Romanians are willing to pay more for a sustainable item and the most frequently purchased sustainable items are organic cotton underwear, recycled polyester backpacks and hemp sneakers⁴⁴.

Empath.ro⁴⁵:

Empath.ro is a company that produces printed t-shirts and hoodies made from 100% organic, certified cotton. All their prints are made with ecological, OEKO-TEX certified ink. They offer products for women, men and children, as well as a small range of lifestyle products. Their business only produces on-demand, so no stock is wasted. Not only that, but they also donate part of their profits to a re-forestation charity and work with and promote local artists who create the print designs for their products. On another hand, they also donate 10% of the profit from each item to a charity that re-plant forests.

She's Linen⁴⁶

This brand produces high-quality, durable and timeless pieces on-demand only. Apart from their clean materials (exclusively organic and natural), they also offer the option to customize any clothing piece by any extent in order to create the perfect item for their customer. They also offer care instructions for each of the items listed in their catalogue and have a section on their website dedicated to educating their customers about slow fashion, and informing them exactly where and how their materials are sourced. Having an educational component helps the customers understand why they should choose slow products, and contributes to creating a more personal and conscious shopping experience.

One Shirt⁴⁷

One Shirt is rather a community and a social initiative than a fashion brand. They employ marginalized people to create t-shirts, jumpers, dresses and bags, in an effort to upcycle unused textiles. Using a distinct pattern made of squares that are made from two different triangles, they make unique pieces for their customers, also allowing them to order a customized piece. The products must be pre-ordered, as they are produced on-demand. They also allow customers to bring their own fabrics to be upcycled into a product of their choice or they can simply donate their fabric scraps.

⁴⁴ https://www.retail.ro/articole/stiri-si-noutati/interesul-pentru-moda-sustenabila-in-crestere-ce-articole-prefera-romanii-3644.html

⁴⁵ https://www.empath.ro/

⁴⁶ https://sheslinen.com/

⁴⁷ https://oneshirt.eu/





3.3.5. Financing opportunities in Romania

There are plenty of financing opportunities in all fields in Romania when it comes to starting a new business. From accelerators to incubators, investors, crowdfunding, scale-ups or non-refundable financing, they are all accessible for the ones interested in starting a new business. While not all of them have sustainability or fashion as a main focus, there are plenty of opportunities for financing such a business in a bigger program that comprises all industries. On another hand, there are some grants especially dedicated to green development, as well as specifically sustainable fashion, which are described below. A majority of these opportunities are founded by European funds.

WORTH II 202248:

WORTH, which is funded by the COSME initiative, is all about fostering international collaborations and promoting design-driven projects/ideas. The added value is strongly rooted in design principles that creatively integrate innovative methodologies and technology.

The project is addressing designers, SME manufacturers, crafters, and technology companies in the lifestyle industries, such as fashion/textile, footwear, home furnishings and decor, leather/fur, jewelry, and accessories, who are searching for new opportunities to implement ideas addressing the New European Bauhaus principles of sustainability, inclusion, and beauty. The selected individuals benefit from an incubator program consisting of $\leq 10.000- \leq 20.000$ seed money, a promotional media kit, international design and networking events and a mentoring program.

The Black Sea ClimAccelerator 2022⁴⁹:

The Black Sea ClimAccelerator is the meeting point for the next generation of local entrepreneurs and innovators developing scalable solutions to manage the climate crisis. The program offers accelerator support for solutions in 3 different stages of development, access to know-how, a network of consultants, mentors and investors and a total funding of €300,000 - all to support innovations that contribute to achieving climate neutrality in Europe. 42 places are available for startups from Romania and Bulgaria, in a comprehensive program including, but not limited to: business modelling workshops, marketing, sales, financial management, business consulting and investment readiness, one-on-one mentoring, pitching sessions, peer sharing and international events. Selected applicants will participate in one of three categories, depending on the stage of development of the startup: Early Stage, MVP or Growth. The type of solutions they are looking for are broad, but they also include opportunities for development of sustainable materials, development of circular economy, reducing emissions in the industry, green services and technologies, innovations for reducing production impacts and Artificial intelligence solutions for reducing impact, which can all include opportunities in the fashion industry.

Greentech Europe 2022⁵⁰:

Greentech Europe 2022 is a new initiative dedicated to assisting gender diversified companies throughout Europe in producing sustainable economic, environmental, and social solutions. Greentech Europe 2022 Emerging Futures is a track for inventors working on a for-profit market-based solution to a European sustainability problem. To be qualified, the founding team must be gender diverse. The program collaborates with local organizations to identify and assist 30 early-stage, small and medium-sized businesses (SMBs), offering them coaching, professional guidance, networking capabilities, and funding to help them succeed - and thus help close the area's gender funding and resource gap. The applicants must have a minimum of 50% female representation and the selected applicants receive €50.000-€500.000 for funding their idea in one of

⁴⁸ https://eismea.ec.europa.eu/news/worth-ii-first-call-now-open-2021-11-23 en

⁴⁹ https://www.impacthub.ro/climaccelerator/

⁵⁰ https://vilcap.com/current-programs/greentech-europe-2022





these areas: sustainable development, climate change and ecology, women entrepreneurs, start and economic development. Here, an innovative and green fashion business idea that supports sustainable development could fit the criteria.

3.3.6. Conclusions and identifying the gaps in Romania

In conclusion, this analysis report has brought about the most prevalent gaps in education and opportunities in the sustainable fashion and textile field in Romania.

After researching the curricula of the higher education study programs, it is clear that the Universities are meticulous in teaching their students the theory and practice of their chosen specialization, however, in these subjects, the topics of sustainable development, and environmental protection are not well integrated. Only few of them actually teach subjects directly related or offer the opportunity for the student to pursue this path, however it is clear that sustainable development is hardly the core focus of any of these programs (with few exceptions). The university that has the strongest sustainability focus and the most programs that integrate these topics is the Technical University of Iasi "Gheorghe Asachi". Looking at the landscape, it is clear that, while there are many available options for vocational education, there are two distinctively different target groups addressed – either technical professionals in the textile field, or artistic individuals from the fashion design, styling and garment making area. None of these courses target both, and it is clear that there is a lack of cooperation and understanding when it comes to the different fields within the T&C sector.

This separation between the two types of practitioners (technical and creative) is also clear in the fashion and textile market. While most of the topics related to sustainable development in the field are presented to the technical-oriented learning branch, the majority of sustainable SMEs are founded and owned by the creatives in the industry, the industry and technological developments hardly reaching their potential.

As for financing opportunities, they exist, but might not be directly catered to the fashion and textile market, but rather general opportunities for funding green (or regular) start-ups.

In conclusion, in order to prosper in the sustainable development of the fashion and textile market, the following gaps must be closed:

- Vocational or academic training opportunities mostly address the technical aspect of sustainability (textile engineering, production, etc)
- Educational opportunities for industry creatives (designers, stylists, etc), hardly include sustainability in their curriculum
- There is no curriculum that combines technical and creative knowledge, creating two completely separate groups of industry professionals
- Cooperation between technicians and designers is limited
- The sustainable fashion market is dominated by SMEs founded by the creative professionals, and hardly cooperate with the technicians
- Innovative tools and methods of production are not well integrated in the actual market
- Sustainable fashion and textile initiatives are perceived as experiments in the "creative industries", rather than being systematically applied in the traditional industries
- The target group of the sustainable fashion market is still a niche, being mostly composed from alternative and creative people and not generally adopted by the average citizen





- Financing for digitalization and technological innovation, or developing a sustain fashion business are not strictly addressing the field

3.4. Greece

3.4.1. General Introduction

Vocational education and training (VET) is state regulated and, until recently, was mostly offered through a school-based approach. Overall responsibility is with the education ministry in cooperation with the labour ministry where appropriate. Compulsory schooling lasts until age 15 and completion of lower secondary education programmes (Gymnasio). VET is offered at upper secondary and post-secondary level. A 2018 law foresees that universities can create VET centres (KEE). There are two main routes at upper secondary level: general education (70% of learners) and VET (30%). Both lead to an equivalent upper secondary school leaving certificate at EQF level 4. On completion of the first year, learners are allowed to change direction from general to vocational education and vice versa.

The main VET route uses three-year vocational programmes at Epaggelmatiko Lykeio school (EPAL) that also lead to a specialisation degree.

Two-year apprenticeship programmes (EPAS) are also available at upper secondary level. They are open to young people, 16 to 23 years old, who have completed at least the first year of upper secondary education. These programmes (WBL> 80%) lead to specialisation degrees at EQF level 4. EPAS graduates can continue their education in post-secondary VET programmes.

Two - to four - year higher professional programmes are offered by higher professional schools, under the supervision of the competent ministry. Admission is granted via general national or a programme-specific examination. The diplomas awarded can be either equivalent to technological bachelor (EQF level 6) in the case of merchant navy academies , or are considered non-university tertiary level diplomas (EQF level 5), as with dance and theatre schools.

EOPPEP is responsible for quality assuring nonformal education, accrediting providers, and certifying qualifications.

3.4.2. Methodology

The research performed for data analysis of Greece consisted of qualitative desk research, through consulting sources such as online resources, government documents, specialty reports and university curriculums.

3.4.3. VET and academic educational opportunities in Greece

VET educational offers

VET of the University of West Attica - Circular Economy: Transition and Strategies - Department of Industrial Design and Production Engineering⁵¹

The aim of the program is to provide the necessary knowledge on the basic principles of the circular economy, the existing legislation and new legislative developments, the need to move from the linear to the circular economy, the benefits of the implementation of the circular economy, the efficient use of resources, the increase of efficiency in the use of resources, the introduction to the principles of circular design and circular production of products and services, logistics/reverse

⁵¹ <u>https://cycleco.uniwa.gr/</u>





logistics, the application of circular principles in the supply chain, the application of the circular economy in the supply chain, the implementation of the circular economy in the supply chain anu the use of resources.

Competencies gained by students during the course include:

- evaluating the linearity and circularity of various products and services from the perspective of the consumer, a firm interested in supplying them, and the firm that provides them
- Identifying opportunities to apply the basic principles of the circular economy to various products and services, at the level of design, production, choice of materials, end-of-life management
- Identifying opportunities to apply the basic principles of the circular economy in a supply chain
- Introducing the concept of the circular economy, the need for transition and the benefits of moving to a circular economy to other stakeholders
- Identifying and evaluating the factors that prevent businesses and different sectors of economic activity from transitioning to a circular economy.

Athens Fashion Club - Seminar "Sustainability in Fashion & Sustainability Strategies"52

Through this seminar, the Designer and the Fashion Entrepreneur in general will fully understand what exactly Sustainable Fashion is, what are the benefits and what he/she should do in order to acquire a "Green Identity" for himself/herself and his/her business. It goes into a lot of very useful Tools that the Fashion Professional can use in every area, from Design, Manufacturing, Business Culture, Marketing to Staff and Facilities, even the Events they hold, etc. They educate on new sustainable fashion business models and set an example themselves by promoting their own collections, Mad Flax and Maria Vytinidou Eco Luxury Brand, focused on the use of ecological materials and Upcycling and Zero waste techniques.

The seminar covers the following topics:

- Basic Principles of Sustainability
- Creating a Corporate Sustainability Strategy
- Design for Sustainability Sustainable Design Strategies
- People (of our Company, our Community, our Supply Chain)
- Enterprise culture for employees and community people.
- Our Supply Chain.
- Ethical Work and Fair Trade Tools to add Ethical fashion
- Slow Fashion Tools and Organizations
- Sustainable Materials Materials Based on Circularity
- Sustainable Materials Guides and Ranking Resources
- Materials Processing and Manufacturing
- Application of Sustainability in Production Facilities
- Jewellery, Accessories, Footwear
- Sustainable Facilities (Buildings and Offices)
- Packaging
- Transport and Logistics
- Customer Service and Problem Solving
- End of Use, Reuse and Recycling.
- Event Planning and Production.
- Communication and Strategies
- Circularity: what the experts say

⁵² https://www.athensfashionclub.com/



Duration: 15 hours



Sustainable Fashion Summer School, The Athens University of Economics and Business and Fashion Revolution Greece⁵³

The Athens University of Economics and Business and Fashion Revolution Greece, inaugurate the first Sustainable Fashion Summer School in collaboration with leading Universities and sustainable fashion institutions in the USA, Europe and Latin America.

Over 25 top educators from institutions from the U.S. and Europe travel for the 3-week educational program that will be delivered to students and industry professionals from all over the world to Greece. The program appeals to those who want to acquire the novel skillset and tools of sustainable and circular fashion while accessing critical research and networks necessary to thrive as fashion revolutionaries.

The curriculum incorporates all the latest innovations in the sector of fashion through four main thematic areas:

- Sustainable Design & Materiality
- New Business Models, Circular Manufacturing & Logistics
- Digital Fashion & FashTech Hackathon, Heritage & Ethics
- Policy

Duration: 3 weeks

Academic educational offers

International Hellenic University, department of Clothing Design and Technology⁵⁴

The course provides academic knowledge and skills at undergraduate level, in the field of creative design in Clothing, following the model of corresponding European undergraduate level programs of study. It cooperates with the production units of the Clothing Market and institutions related to its field of knowledge and participates in events and competitions with the aim of developing students' creativity and keeping them in constant contact with the fields of art and technology.

The objectives of the curriculum of the Department of Creative Design and Clothing are achieved through three areas of Art & Science:

- The Clothing Design strand includes knowledge & skills related to Art & Clothing History, Fashion Semiotics, Body Metrics, Artistic Dimension of Design.
- In the Clothing Technology strand, knowledge & skills related to the Technology of materials, processes and procedures, Quality Control, and CAD/CAM Technology for the creation of Fashion products are included.
- In the Fashion Marketing strand, knowledge related to Market and Consumer Research, Marketing, Brand Management, Brand Creation and Management, Promotion and Retail Presentation of Fashion products are included

Department of Industrial Design and Production Engineering of the University of West Attica. Industrial Design and Manufacturing Engineer⁵⁵

The object of the Department of Industrial Design and Production Engineering is the design of modern systems and services following the best approaches in the interdisciplinary field of design, creatively combining knowledge and methodologies from a wide range of sciences and emphasizing the use of new technologies for the design and production of innovative products.

⁵³ https://greece.fashionrevolution.org/en/

⁵⁴ https://cdc.ihu.gr/

⁵⁵ <u>https://idpe.uniwa.gr/en/</u>





The purpose of the Department of Industrial Design and Production Engineering is to produce graduates who will be able to creatively use new technologies, science and art to design solutions in the form of easy-to-use and functional Products, Processes and Systems in all production sectors. The Department responds in this way to the current and emerging needs for executives in industry and business in global competition. The Department of Industrial Design and Production Engineering of the School of Engineering of the University of West Attica has the" Laboratory of Design and Development of Knitted Innovative Textiles and Clothing Products (SAPKE).

The course aimed at:

- the supply of high-quality tertiary education at both theoretical and laboratory level;
- the continuous adaptation of the educational subject to the new developments of science, research and technology;
- the fostering of specialized abilities to combine sciences, technologies, methods, materials and properties in order to develop innovative products and services;
- the shaping of rational thinking and analysis to solve practical problems and apply the theoretical knowledge to the established and modern industrial methods;
- providing a solid and extensive scientific background for the purpose of mobility and flexibility in the modern competitive international environment, meeting the needs of the labor market;

MSc - Postgraduate Studies Program - "New Textile Materials and Technologies in Fashion Design" 56

The main objective of the Postgraduate Program "New Textiles and Technologies in Fashion Design" is the study of management strategies and new technologies in Fashion Design. Students deepen the knowledge of new technologies, materials and processes in Fashion Design.

The mission of the MSc "New Textile Materials and Technologies in Fashion Design" is to further advance scientific knowledge and technology in the broader field of the MSc's subject matter, to promote research and development of innovative methods, processes and products in the area of Materials and Fashion Design, taking into account the development needs of the country and the companies in the sector. In particular, the mission of the MSc is to train graduates (Graduates - Diploma holders) of Technological, Scientific and Economic Higher Schools (Universities and Technical Universities) in the basic principles of textile industry processes and technology, quality control and the theoretical principles governing it, technology and applications of new materials, design methodology, product development and advanced methods of application of dyes and electronics in the clothing industry and fashion design, modern management strategies and finance of clothing companies, standardization and systems analysis, planning of business resources.

3.4.4. Good practices in the Greek fashion and textile market

TCBL | Business Pilots - Natural Cotton⁵⁷

⁵⁶ <u>http://textiles.daidalos.teipir.gr/?page_id=16&lang=el</u>

⁵⁷ https://tcbl.eu/business-pilots/natural-cotton





TCBL is building a multi-faceted business ecosystem of sector enterprises, innovation labs, servic providers, and business advisors, all working together to transform the Textiles and Clothing industry. The common objective is to build alternative paths to over-production and diminishing value while returning 5% of production capacity and reducing environmental footprint by 20%, within 2025.

TCBL is a research and innovation project funded by the European Union's Horizon 2020 program under Grant Agreement 646133. It brings together 22 organizations from 11 EU Member States. The Natural Cotton business case investigates ways in which TCBL can promote sustainable and eco-friendly choices in the textile and clothing value chain by concentrating on the use of natural materials (cotton, silk, wool, ...). Firstly, the case will exploit the increasing interest of consumers for eco-sustainable products, which is an existing market trend offering new business opportunities and secondly, the Natural Cotton case seeks to revitalize these value-chains by renewing the way they operate. This revitalisation will also be achieved through the building of more direct connections between the producers.

ERGON MYKONOS 58

Famous for their environmentally friendly approach, this brand uses fabric made from 100% Greek cotton, and sources all other materials locally as well, in an effort to achieve both environmental and social sustainability. All garments are created in the company's atelier in Athens. Some of the fabrics they use are woven on a loom inspired by one used in ancient Greece – this manufacturing technique gives their clothes excellent breathability.

As the latest step in making their production cycle earth-friendly, they have adopted a made-to-order system, eliminating the possibility of stock ending up as waste. Your clothes will now be sewn only after you place your order, but will still be completed within five working days.

HEEL 59

Dedicated to slow fashion, Heel intentionally creates small quantities of each garment in their collections, and aims to make designs that are timeless, motivating their customers to purchase fewer items and use them longer. Their designs are flowing and soft, perfect for when you want to look stylish while also feeling comfortable, and the materials are suitable for that as well; 100% organic cotton and other natural fibers are chosen both for the sake of the environment and because they're kindest to the skin. Aiming to produce zero waste, the company is continuously producing a separate collection titled "Art Zero Waste" out of the fabric scraps from their regular line.

SALTY BAG ⁶⁰

This Corfu-based brand also saw an opportunity to use reclaimed material in their sturdy, waterproof bags; their bags and luggage are made mainly from old yacht sails. In addition, they use recycled polyester and vegan leather, as well as reclaimed seatbelts and rope.

Discarded sails display various states of wear; Salty Bag manages to embrace any stains, creases or other marks on the material, making them part of each bag's charm and sometimes adding the words "This was once a sail." Their minimalistic bags are beachy, yet also just as appropriate to pair with resort wear, or to carry to the tennis club or, obviously, on board a yacht.

3.4.5. Financing opportunities in Greece

Grants to new and small and medium-sized enterprises for Research & Technology activities of the Ministry of Development

⁵⁸ <u>https://ergonmykonos.com/</u>

⁵⁹ https://heelshop.gr/

⁶⁰ https://saltybag.com/





The Act aims to develop and strengthen industrial research and experimental development by funding projects to be carried out in Greece by dynamic enterprises, which are starting or have already developed production and commercial activity and includes the textile, clothing and textiles sector. The public expenditure of the Act amounts to EUR 11280000 and the total budget is estimated at around EUR 19 million. The total public expenditure of the action will be divided in 60% and 40% in two rounds of proposals. The maximum budget per project is EUR 200000. The maximum duration of the projects to be funded under this call for proposals is between 24 and 36 months.

Operational Programme Competitiveness, Entrepreneurship and Innovation 2014-2020 (EPAnEK)⁶¹

The Operational Program "Competitiveness, Entrepreneurship & Innovation" (EPAnEK) is one of the seven Sectoral and thirteen Regional Operational Programs of the Partnership and Cooperation Agreement (NSRF) for the period 2014-2020, which was approved by the C (2014) 10162 final EU Decision of 18/12/2014.

The 6th Revision includes the allocation of additional resources by REACT-EU for the year 2021, amounting to 1.6 billion euros of Community Assistance. These additional resources are helping to address the increased fiscal policy needs due to the second wave of the COVID-19 pandemic. The Revision was approved on 14/06/2021 by Decision No. C (2021) 4441/ 14-6-21 final Implementing Decision of the European Commission.

EPAnEK continues to cover the whole of Greece and has a 8,03 billion Euros public expenditure budget (6,58 billion Euros EU contribution). The pivotal strategic objective of EPAnEK is to enhance the competitiveness and extroversion of enterprises, to facilitate transition to quality entrepreneurship, while at the same time advancing innovation and growth of domestic added value. The Operational Programme Competitiveness, Entrepreneurship & Innovation occupies a central position in the country's efforts to create a new production model that will lead to development and will strengthen the competitiveness of the Greek economy by leveraging private financing. The new model brings to the fore productive, competitive and outward looking sectors of the economy, such as tourism, energy, agri-food, the environment, the supply chain, information and communication technologies, health and the pharmaceutical industry, creative and cultural industries, materials – construction.

Green Fund⁶²

The Green Fund may finance programmes drawn up by the Ministry of Environment, Energy and Climate Change or other Ministries and their supervised organisations, decentralised general administrations, local authorities, legal entities of the wider public sector, as defined by the provisions of article 1 of Law No. 1256/1982, and unions or other forms of associations of legal and natural persons, which aim according to their statutory purposes to protect, upgrade and restore the environment.

3.4.6. Conclusions and identifying the gaps in Greece

The market for the "green fashion" is an expanding development, reflecting the big change in the consumer behavior, representing a huge opportunity of growth for the textiles and fashion sector in Europe. The availability of adequately skilled employees has become one of the major issues for the fashion industry. The industry urgently needs a flexible workforce that can respond to the development and the globalized market and the need for sustainable design and manufacturing in order to face the global demand for sustainable creative products.

⁶¹ http://www.antagonistikotita.gr/epanek_en/index.asp

⁶² https://prasinotameio.gr/





In this frame the main objective of the GIF project is to design and develop a correspondent trair kit.

The sustainability specialist is a senior level manager, employee or manager who communicates and coordinates with management, shareholders, customers and employees to address sustainability issues. These professionals oversee an integrated set of activities that are related to reducing environmental impacts and implementing sustainability principles. As a result, the sustainability specialist develops, implements and evaluates programs that support the goals of social sustainability,

environmental and economic sustainability. Most sustainability specialists come from different professional backgrounds and enter the profession into this position through past experience in leading staff. At in their role as key organizational leaders, sustainability specialists need to have excellent skills in strategic planning, human resource management and leadership. human resources and relationship building

A sustainability expert for fashion should have skills and competencies in:

- Sustainability (environmental, social and economic) Analysis and Management
- Sustainable design concepts
- Corporate social responsibility
- Environmental legislation
- Health & Safety Legislation and
- Industrial Sustainability
- Energy management
- Carbon footprint
- Climate change
- Sustainable business models, Environmental economics and Social responsibility legislation.

3.4.7. Other information

The next big thing in fashion is Legislation. Specifically, legislation to tackle greenwashing and the unforeseen environmental destruction caused by fashion brands. In March, the EU approved a proposed directive on "mandatory human rights, environmental and good governance due diligence", meaning that when it becomes law, companies will have to pay a fine if they cause damage by not doing due diligence. Companies, including fashion brands, will have to take responsibility for their entire supply chain, ensuring they prevent child labour, allow freedom of association and protect biodiversity, among other things.

Last October, the UK Competition and Markets Authority announced the Green Claims Code. Brands that make misleading or vague sustainability claims, claims that are unsubstantiated, omit information and do not take into account the entire life cycle of a product may, from January 2022, be in breach of consumer protection laws. Thus, a fast fashion brand that releases a "sustainable" collection without stating exactly what makes it sustainable will no longer exist.

Smaller-scale measures are also being taken, such as Massachusetts' plan to add textiles to the list of materials prohibited from being disposed of in the state to boost recycling rates and recover resources. Also, the United Kingdom announced that it will consult on an expanded producer responsibility system (where producers take physical or financial responsibility for the disposal of goods) for textiles. The US Federal Trade Commission is due to review the Green Guides (their version of the Green Claims Code) next year. The EU has proposed stricter sustainability reporting measures for large companies and a group of more than 50 brands, suppliers, NGOs, retailers and associations supported the call at Textile Exchange's COP26 for incentives to use "environmentally preferable" materials.





3.5. Spain

3.5.1. General Introduction

The law defines a single vocational training system as a set, which identifies the professional competencies of the labor market, ensures suitable training offers, enables the acquisition of the corresponding training or, where appropriate, its recognition, and makes it available to the population a professional guidance and support service that allows the design of individual and collective training itineraries⁶³.

A model of professional training, recognition and accreditation is established based on training itineraries facilitators of progression in training. It is structured in five degrees ascending A, B, C, D and E descriptive of the Training Offers organized in Units designed according to the National Catalog of Competency Standards Professional. A State Register of Training Professional will allow any citizen to access it and obtain a LifeTraining-Professional certificate. Flexibility is expanded in the design of the curriculum, so that each educational administration can incorporate elements that improve the adjustment of training to the specific needs of the productive sector in its environment.⁶⁴

Within the framework of the National Catalog of Professional Qualifications, the professional family of Textile, Clothing and Leather covers a wide range of productive activities, grouped for study in five areas:

- Footwear and leather goods: covers activities dedicated to the manufacture of footwear of any type and of any material, travel items, handbags and others, provided that the same technology and process are used as for leather.
- Clothing: includes the activities dedicated to the manufacture of outerwear, underwear, for men, women, boys and girls, clothing for the home, upholstery items, as well as the production of other clothing accessories and other accessories.
- Leather tanning: encompasses those activities dedicated to the preparation, tanning and finishing of leather, and dyeing of hides, among other tasks.
- Textile ennoblement: covers activities dedicated to textile treatments and finishes such as bleaching, dyeing, dressing, drying, steaming, shrinking, mending, sanforizing and mercerizing textile fibers, threads, fabrics and textile articles, including garments. wear.

⁶³ Organic Law 3/2022, of March 31, on the organization and integration of Vocational Training.

https://www.boe.es/buscar/act.php?id=BOE-A-2022-5139

⁶⁴ https://incual.educacion.gob.es/textil_descripcion





- Spinning and weaving: includes the activities dedicated to spinning and manufacturing filament or thread for weaving or sewing and the manufacture of openwork, knitted and non-woven fabrics, with different materials such as cotton, wool, worsted wool or silk. , including those made from mixtures or artificial or synthetic threads, among others.

All of these areas include specialized design activities, that is, the creation and development of specifications that optimize the use, value, and appearance of products, including decisions about materials, mechanisms, shapes, colors, and finishes, taking into account the characteristics and needs of customers, safety, market demand and distribution, use and maintenance.

3.5.2. Methodology

To identify the present conditions, trainings, and educational options (academic and VET) in Spain related to sustainable development, environmental protection in the fashion sector in Spain the following documents were consulted:

- National regulation, concretely the new Organic Law 3/2022, of March 31, on the organization and integration of Vocational Training.⁶⁵

To review an integration of GIF topics into VET and academic trainings a consultation of the following documents was made:

 Current related VET within the framework of the National Catalog of Professional Qualifications, the professional family of Textile, Clothing and Leather covers a wide range of productive activities, grouped for study in five areas⁶⁶

To identify competences, and best practices in the identified educational programs:

Current situation of VET in sustainability scenario from the executive summary of the
 Observatory of Vocational Training in Spain. Report 2021: VET as a key to development and sustainability⁶⁷

To identify patterns, gaps and opportunities in the mentioned field:

- Consultation of final degree project: The challenge of sustainability in the textile-fashion sector. Tamara Folgueira. Double Degree in Business Administration and Management and Law Year 2017-2018 University of Coruña.
- A meeting with the Responsible for Sustainable Development, General Sub-Directorate of Information and Promotion of Sustainability, General Directorate of Environmental Policies and the Natural Environment of our regional administration; who present the THE CIRCULAR FASHION PACT, a response proposed by Catalonia government⁶⁸

⁶⁸<u>https://mediambient.gencat.cat/web/.content/home/ambits_dactuacio/empresa_i_produccio_sostenible/economia_verda/Obs-econom</u> <u>ia/moda-circular/Circular-Fashion-Pact_220419_summary.pdf</u>

⁶⁵ https://www.boe.es/buscar/act.php?id=BOE-A-2022-5139

⁶⁶ https://incual.educacion.gob.es/textil_descripcion

⁶⁷ https://incual.educacion.gob.es/textil_descripcion





 Keeping contact with the responsible of Sustainability and Circular Economy Area in MODACC, Fashion Catalan cluster, member of CLOTH project - Cluster Alliance fOr the Transition to green and digital fashion⁶⁹

To identify educational offers in Spain(which didactical methods are used for teaching & training) a comparison between c-VET and HE providers programs in Spain was made.

- Universidad Ramon LLull⁷⁰
- UIC (International Catalonia University)⁷¹
- SLOW FASHION NEXT A platform who promotes Sustainable, Circular and Regenerative Fashion. Since 2011 they have helped Fashion professionals and companies to transform into the solution that the sector needs as a strategic challenge⁷²
- FITEX, a brand of the Private Foundation for Textile Innovation, a private non-profit organization whose fundamental objective is to promote the innovation process of the knitwear industry⁷³

3.5.3. VET and academic educational opportunities in Spain

VET educational offers

Slow fashion next⁷⁴

Slow Fashion Next is the Platform for Training and Dissemination in Fashion, Sustainability and Business Reference in the Sustainable Fashion sector with 10 years of experience, which wants on the one hand to help all those companies, students and entrepreneurs who wish to have a leading and realistic training on fashion and sustainability in relation to the business world, accelerating their learning process and on the other hand helps to give visibility to all projects of brands and fashion companies that work with real criteria of sustainability.

Aimed at any professional and student of the different points of the value chain of the fashion industry: entrepreneurs and future entrepreneurs of sustainable fashion brands and initiatives, material suppliers, workshops, pattern makers, garment makers, designers, distributors, communicators, among others, who have sustainability and ethics at the core of their business. Courses provided:

- Fashion and Agenda 2030 The **objectives** of this course are as follows:
 - To learn about the 2030 Agenda and its 17 Sustainable Development Goals.
 - Learn how to work with these Goals applied directly to your company.
 - To discover how sustainability is much more than just choosing the right material, reaching aspects such as governance, business cultures or the improvement of society in general.
 - Raise your awareness of all these different aspects and commit to continuous improvement.

⁶⁹ <u>https://www.modacc.cat/</u>

⁷⁰ <u>https://esdi.es/estudios/masters-y-postgrados/</u>

⁷¹ https://cloud.info.uic.es/Moda 2021 ENG

⁷² https://www.slowfashionnext.com/

⁷³ https://www.fitex.es/

⁷⁴ <u>https://www.slowfashionnext.com/</u>





- Learn how to work well on the SDGs with concrete targets and indicators.
- Help you to start traceability work with your supply chain.
- Help you to start working on Transparency and Differentiation for your customers, and avoid Greenwashing.

Duration: 11 weeks

- Introduction to Sustainable and Circular Fashion:

This course is aligned with the Sustainable Development Goals, especially with the SDGs: 12 Responsible Consumption and Production, 4 Quality Education, 1 End Poverty, 13 Climate Action, 14 Marine Life and 15 Life of Terrestrial Ecosystems.

The **objectives** of this course are as follows:

- To learn what sustainable fashion really is
- To learn sustainability criteria, its keys, values and vocabulary in an easy and enjoyable way through unique, exclusive and totally updated contents with which you will immediately implement everything you have learnt.

Duration: 12 weeks

- Sustainable Materials and Circulars:

With this course you will learn the key concepts of sustainability and circularity when choosing the best materials for your collections, fashion and textile products and packaging. You will also discover innovative and sustainable materials that inspire and encourage.

Duration : 6 weeks

Online course on sustainable materials for sustainable fashion and fabrics

This basic course on sustainable fabrics is especially aimed at designers and fashion brands interested in sustainable fashion and wanting to contribute positively to the textile industry. It is also addressed to any professional in the sector, stylists and editors, who know how to differentiate between the different subjects and which are the most interesting in terms of textile sustainability. The objectives that you will achieve as we progress through the agenda are:

- Learn the key concepts of sustainability when choosing the best materials for your collections and fashion and textile products.
- Discover the qualities of the different fibers.
- Differentiate materials and how to use them.
- Know which materials are the most suitable for each product and where to source them from
- Discover innovative and sustainable materials that inspire and excite your clients.
- Choose better the materials of your packaging.

Duration: 7 weeks

Online course of introduction to sustainable and circular fashion

This is a course with which you will learn what sustainable fashion really is, its sustainability criteria, its keys, values and vocabulary in an easy and enjoyable way through unique, exclusive and fully updated content with which will implement immediately everything learned. It addresses professionals from the entire value chain of the fashion industry and fashion businesses already created and for entrepreneurs who are developing their business idea.





This course is aligned with the Sustainable Development Goals, especially with the SDGs: 12 Responsible Production and Consumption, 4 Quality Education, 1 End of Poverty, 13 Climate Action, 14 Life Underwater and 15 Life of Terrestrial Ecosystems.

In this new edition, access as a guest to our Networking Forum for the duration of the course will be granted so that interaction with classmates and with the rest of the community, in addition to being able to attend the masterclasses for free and Exclusive weekly sessions that we do live online. Duration: 12 weeks

Academic educational offers

Master in Management of the fashion industry in ESDI75

Learn to lead a fashion company from a strategic approach of positioning, branding, product, price, distribution, marketing and communication, delving into essential concepts today such as good ESG criteria and practices, the circular economy, the new inclusive realities, ecodesign, sustainability and digital transformation. Offer the essential tools for understanding and managing the fashion business, from a creative, commercial and communicative point of view in all sectors, whether they are large companies or start-ups.

Methodology based on theoretical and practical sessions, analysis of the current situation to determine current trends, approach and resolution of practical cases and individual and group tutored projects. Faculty with extensive professional experience in companies in the fashion sector, achieving a balance between senior executive positions and profiles with more creative or design-related positions, both in large companies and startups.

Communication, brand management and sustainability in the fashion industry Master's UIC (International Catalonia University)⁷⁶

This degree programme offers a cross-disciplinary education in sustainability throughout the supply chain of the fashion industry, from brand to consumer, with a focus on transparency. The objectives and topics covered in this course include:

- To offer a global knowledge of the fashion market, trends and the positioning of companies in the sector today.
- To provide practical knowledge on strategy, channels and new communication tools in the fashion sector.
- To offer a complete and transversal vision of sustainability throughout the fashion supply chain and to provide the means to develop a transparent storytelling in the management of its communication with stakeholders and the consumer.
- To train students in the strategic organization of events in the fashion sector.
- Acquire new skills through the Master's internships and learn first-hand about the work developed by professionals in the sector.

University expert: Creation of sustainable fashion collections in Tech España⁷⁷

The goals of this degree are to teach students to:

-Obtain detailed knowledge about fashion design and its evolution, which will be relevant for the work of professionals who wish to develop in this sector.

- Make designs on paper and digital techniques that reflect the design devised.

-Use the techniques of pattern making and clothing to create garments and accessories.

⁷⁶ https://cloud.info.uic.es/Moda 2021 ENG

⁷⁵ https://esdi.es/estudios/masters-y-postgrados/master/gestion-de-la-industria-de-la-moda-y-el-diseno

https://www.techtitute.com/diseno/experto-universitario/experto-creacion-colecciones-moda-sostenible?gclid=Cj0KCQjwlemWBhDUARIs AFp1rLUNbfpJ1ss2r9jMLAvINF9gWCjCPBfvyerMohFFytxPFGJo-Le5DdgaAubJEALw_wcB





- Obtain detailed knowledge about the history of fashion, which will be relevant for the work of professionals who wish to develop in this sector today.

- Design successful fashion projects
- Learn about fashion photography to get the best out of the collections created

3.5.4. Good practices in the Spanish fashion and textile market

With the recovery of textile and clothing production in Spain, the activity of the productive chain requires new technologies for the processing of garments and textiles, needless to say, also in the footwear and leather goods sector, which provide added value to the product and make production competitive. The perception of better business is leading several companies to speed up their production processes with the latest technologies to respond to increasingly demanding markets, that is, to achieve greater efficiency and flexibility in production means to be more competitive, to bet on production in proximity, due to the increasingly notable trend towards production in short series.

The challenges that fashion faces are the strong national and international competition for industrial, design and distribution companies, the ups and downs of consumption in the local market and the growing demands that the development of technology entails. In this sense, concepts such as industry 4.0, big data, sustainability, omnichannel or technology at the point of sale should not be seen as problems, but as opportunities.

Latitude

A Galician company. Latitude has wanted to make a difference with the current textile industry, having sustainability as its backbone. Not only does it make its own collection, but it also works as a supplier for other brands and as a center for research and innovation. Galicia has managed to make another way of making fashion a reality: sustainable and responsible, local, with fair wages, decent working conditions and respectful of the environment. For this, it is working in all the aspects of textile production and with all representative companies of the sector in Spain and in Europe. Latitude has created a network of 4.0 workshops in which not only the product is taken care of, but also people and the environment. In addition, they are creating the first Latitude social workshop to employ women at risk of exclusion with children in their care.

Clean clothes

The Clean Clothes Campaign is an international network of NGOs, trade unions and consumer organizations, collaborating with more than 200 workers' organizations around the world, working to improve conditions in the garment industry. Since the early 1990s, it has denounced bad labor practices in the textile-fashion sector, supporting workers in their struggle for decent conditions. At the state level, the Clean Clothes Campaign is coordinated by the SETEM Federation (Clean Clothes, s.f). It has objectives such as ensuring that working conditions are equivalent to those established by the International Labor Organization (ILO) or minimizing the impact of textile production on the environment, among others. To do this, they investigate the situation of textile workers, try to raise awareness and mobilize consumers, put pressure on companies and denounce cases of violation of labor rights (Clean Clothes, s.f).

Inditex.

Inditex is committed to the circular economy. To this end, in 2015 they launched Closing the Loop, an initiative that aims to reuse and recycle products. To this end, it has containers in its stores, and makes donations to non-profit entities such as Cáritas, Oxfam or the Red Cross (Inditex, 2016).





In addition, with the Join Life sustainable fashion line, it aims to guarantee that the products hav been produced under appropriate social and environmental conditions.

They collaborate with Lenzing, manufacturer of Tencel, and with whom they have created Refibra in 2016, created from recycled cotton and sustainable wood. With the aim of researching new fibres, it has signed agreements with the Massachusetts Institute of Technology (MIT) and different Spanish universities (Inditex, 2016).

They work with 1,805 suppliers and 6,959 factories in 53 different countries, with 59% of the manufacturers close to their headquarters in Arteixo. All of them must comply with the company's Code of Conduct for its suppliers, which requires the highest standards in terms of protection of human rights and promotion of international labor regulations, health and product safety, and environmental aspects. Thanks to their traceability systems, they reach the last link in the production chain, knowing where the products are made and under what conditions. In the 2016 financial year, they carried out 2,776 traceability audits (Inditex, 2016)

3.5.5. Financing opportunities in Spain

In Spain, the programmes to boost competitiveness and industrial sustainability, the line of support for Strategic Projects for Industrial Transition (PERTE) is endowed with \in 3,808 million (\notin 2,368 million in grants accompanied by \notin 1,440 million in loans for the mixed financing of the programmes).

MITECO⁷⁸

The Ministry for Ecological Transition and the Demographic Challenge (MITECO) has published the draft ministerial order establishing the bases and calling for applications for aid to promote the circular economy in Spanish companies, with the aim of fully implementing the circular economy in the productive sector. The deadline for submitting suggestions is 7 April 2022.

These grants constitute the second line of action of the Strategic Project for Recovery, Transformation and Resilience (PERTE) of the Circular Economy.

The call will finance investments in the four main categories of action: reduction of the consumption of virgin raw materials; eco-design; waste management and digitalisation.

This instrument is aligned with the objectives of reactivating the general economy and the industrial sector and boosting the resilience of the national productive sector.

PERTE⁷⁹

PERTE (Proyectos Estratégicos para la Recuperación y Transformación Económica) are a new public-private collaboration instrument in which the different public administrations, companies, businesses and research centres collaborate. Its aim is to promote major initiatives that clearly contribute to the transformation of the Spanish economy.

The Strategic Plan for Economic Recovery and Transformation (PERTE) in circular economy is one of the most ambitious plans of the Next Generation funds aimed at promoting projects in the field of

⁷⁹ <u>https://www.miteco.gob.es/es/ministerio/recuperacion-transformacion-resiliencia/perte/Copia_3_de_default.aspx</u>

⁷⁸<u>https://www.miteco.gob.es/es/prensa/ultimas-noticias/el-miteco-lanza-a-informaci%C3%B3n-p%C3%BAblica-la-convocatoria-de-ayu</u> <u>das-al-impulso-de-la-econom%C3%ADa-circular-en-empresas/tcm:30-537929</u>





sustainability for all types of companies: micro-enterprises, SMEs and large companies. In ge terms, the plan has three basic objectives: to reduce waste generation; to promote waste treatment plants and to increase digitalisation in companies and institutions.

The PERTE on Circular Economy seeks to accelerate the transition towards a more efficient and sustainable production system in the use of raw materials. The PERTE extends this approach to all productive sectors, as well as to consumption and waste management. Planned investments include support worth 492 million euros and are expected to mobilise resources in excess of 1.2 billion euros by 2026.

GRANTS FOR PROJECTS TO PROMOTE THE CIRCULAR ECONOMY TES/3340/2020⁸⁰

The aim of this line of grants is to promote projects to accelerate the transition to a circular economy in Catalonia improving efficiency in the use of material resources and decoupling overall economic development from resource consumption.

The following beneficiary companies are eligible for the subsidies regulated by these rules, provided that they have at least one operational establishment located in Catalonia, that the main action(s) covered by the call for proposals are carried out in Catalonia and that the subsidised project benefits the aforementioned establishment or the territorial scope of Catalonia:

- Class A or B projects: private companies and groups of private companies.

- Class C projects: the applicant promoter must be either a business organisation whose purpose is to represent the interests of a business sector, provided that it is of a private nature and has its own legal personality, or a trade union.

3.5.6. Conclusions and identifying the gaps in Spain

Responsible consumption is on the rise, more and more people are taking sustainability criteria into account when consuming, therefore sustainable fashion, as an important part of the economy, is a clear business opportunity. In addition, investment funds and ETFs with ESG criteria are increasingly in demand, so if the managers of these funds find companies in the fashion world that apply these criteria, they can include them in their portfolios.

3.5.7. Other information

THE CIRCULAR FASHION PACT, A RESPONSE PROPOSED BY CATALONIA⁸¹

This initiative is one of the circular economy pilot actions chosen by the European Union within the Interreg Europe CircE project.

The Circular Fashion Pact is an open, transversal and innovative initiative to transform the textile sector. It came into being with the involvement of the Government of Catalonia and all the agents in the textile value chain, who worked together to develop its content and ensure that it can be rolled out from 2022.

⁸⁰https://residus.gencat.cat/ca/consultes i tramits - nou/tramits/detall/Ajut-economia-circular-2020?category=

⁸¹https://mediambient.gencat.cat/web/.content/home/ambits_dactuacio/empresa_i_produccio_sostenible/economia_verda/Obs-econom ia/moda-circular/Circular-Fashion-Pact_220419_summary.pdf





The Circular Fashion Pact is an initiative that promotes a voluntary agreement to further the transition of the textile sector to a circular model, based on a comprehensive perspective that brugs together all the public and private agents in the value chain.

The Circular Fashion Pact is one of the measures supported by the European Union as part of the Interreg Europe CircE project (from January 2007 to June 2021). The aim of this pilot project was to further the transition to a circular economy in Catalonia (and 7 other European regions) in certain business sectors with great potential for replicating it and promoting innovation throughout Europe.

Catalonia stands out in Europe because of its great potential for making use of textile waste: we have a long history of factories that use recycled textile materials in their production processes.

The Government of Catalonia , as a partner in the CircE project, presented the Pact as a pilot scheme in 2019. From 2020 to 2021 work was carried out on designing and developing it, so that it could be implemented from 2022.

Agents of pact:

PRIVATE SECTOR Manufacturers Ecoalf Mango Anged Cecot Modacc • Moda FAD Moda Sostenible Barcelona PIMEC Waste managers PreZero •Formació i Treball •Humana Foundation Griñó Roba Amiga/Solidança •Gremi de Recuperacio Textile industry Antex •AEI Textils Hilosa •Triturats La Canya Texfor PUBLIC SECTOR Government of Catalonia Ministry of Climate Action, Food and Rural Agenda (DACC) • Ministry of Business and Labour (DTES) Local government ACM •AMB • Barcelona Provincial Council •FMC





OTHER AGENCIES

Universities, research and technology centres

- Eurecat
- Fitex
- Intexter
- •Leitat
- •TecnoCampus

Environmental third sector •Rezero

Overall objectives of the Pact for 2024*

- Reduce the generation of textile waste (kg/person/year)
- Increase the % of textile waste collected separately
- Increase the% of textile waste collected separately that is recycled

Specific objectives by segment

Producers (textile industry and distribution to end customers)

- Increase durability
- Increase recyclability
- •Reduce/eliminate the use of harmful substances
- Develop strategies for cleaner, more efficient production
- Reduce the environmental impact of micro fibres
- Increase the % of recycled textile material incorporated in products
- Adapt the industry to the requirements of circular textile
- production
- Collection of textile waste at points of sale
- Ensure preparations are made for the reuse of all textiles collected.
- Organise campaigns to raise consumer awareness

Waste managers

• Increase the % of textiles reused , on the local, national and European

levels (in that order of priority)

• Increase the % of textiles recycled , on the local, national and European levels (in that order of priority)

- Sort textile waste collected in Catalonia locally
- Ensure traceability and transparency in the flows processed and their
- destination
- Contribute to the development of local recycling industries

Local government

- Increase the number of collection points per inhabitant
- Increase separate collection in terms of kg/person/year
- Intensify efforts to raise awareness among the public and in government
- Implement public procurement of circular textiles to foster demand
- Establish a model for contracting the collection of textiles in each region that will encourage separate collection and reuse





Government of Catalonia

- Develop policies that contribute to a circular system in the textile sector
- Give institutional support to initiatives promoted by the Pact
- •Implement the public procurement of circular textiles to foster demand
- •Support the joint funding of projects developed within the context of the Pact
- Contribute to raising awareness among the public and in government
- •Support the development of the local recycling industry

Universities, research and technology centres

•Promote circular design at all stages of the training cycle for fashion students and professionals working in the field

•Innovate in materials and technologies

Environmental third sector

• Take part in initiatives promoted by the Pact

• Publicise action taken by the Pact to promote circularity in the sector

•Encourage waste prevention and separate collection, and promote reuse among the public/consumers

From MODACC, Fashion Catalan cluster member of CLOTH project - Cluster Alliance fOr the

Transition to green and digital fasHion - is the new European alliance within the fashion sector, with the aim of creating a favorable ecosystem of stakeholders, from an intersectoral perspective, that leads to a sector of the greenest, smartest, most competitive and most innovative European fashion.

The CLOTH project is made up of 5 partners from 5 European countries (Spain, Bulgaria, Romania, Denmark and France) who work in different value chains: fashion and textiles, circular economy, creative and digital industry.

The CLOTH project is created by the European Innovation Council and Executive Agency of SMEs (EISMEA), under the powers delegated by the European Commission, the COSME program, call COS-CLUSTER-2020-3-03 / COS-CLUSTER-2020 -3-03-1 (Excellence Program of European Clusters with the ClusterXchange program connecting ecosystems and cities).

Partners:

- Catalan Textile and Fashion Association (MODACC) Spain
- Bulgarian Fashion Association (BFA) Bulgaria
- Ea Eco-entreprises Association (EA) France
- Asociata Iconic Cluster (ICONIC) Romania
- Lifestyle and Design Cluster (LDC) Denmark

4. OVERALL CONCLUSIONS





The State-of-the-Art analysis, as part of the first Intellectual Output of the GIF project, performed across all five partner countries (Italy, Germany, Romania, Greece and Spain). An extensive research of the academic and vocational education opportunities, financing opportunities and good practices in the fashion and textile market in each country has been performed. The final conclusions of this report are as follows:

- There are few opportunities for a fully-rounded academic education in the field of sustainable fashion and textiles as well as few opportunities in the job market following such studies
- A majority of the existing educational opportunities in the field of sustainable fashion and textiles are coming from the vocational education and are either aimed at industry professionals (niche) or general beginner-level
- Among the countries analyzed in this report, Italy, Romania and Greece have better VET offers, while Spain and Germany offer better academic opportunities in the field of sustainable fashion and textiles
- Stronger cooperation with the industry, businesses and relevant stakeholders is lacking and would be highly beneficial to improve in order to create more job opportunities and a well-rounded education
- While there is high demand for experts in sustainable fashion and textile from the industry, a gap between the skill level required by the employers and the skill levels of the potential employees leaves a high number of jobs with few qualified people to perform them
- The sustainability sector, as well as the fashion and textile sectors can be very broad, making it difficult to find a niche to specialize in
- There is an existing market for sustainable fashion and textiles across every country, which shows that there is a demand and a target group in each country that are interested in buying and learning more about sustainable fashion, as well as some experienced businesses and creators with different innovative concepts
- There are available investment funds in each country that can be accessed by entrepreneurs that want to open a sustainable fashion business
- There is a big need for accessible thorough education in the field of sustainable fashion and textiles, that addresses a broader spectrum of learning, combines practice with theory and the industry, and creates skilled professionals that can respond to the demands of the current job market.

5. ANNEXES

5.1. Italy





5.1.1. VET educational opportunities in Italy

VET programme	Topics and competencies within the identified programme	Link to the GIF topics/relevance for the project	Didactical tools and training materials used within the program
New Sustainable Fashion	 Topics: circular economy, recycling, upcycling, prosumer-creation, open-source, crowdfunding, wearable-technologies, online-offline integration, transmedia-storytelling, B-corporations and open-innovation. The short course aims at sharing with the participants the most updated information and interesting examples on innovative business models in fashion & luxury. Goals: Preparing the participants to deal with the complexity of responsibility in the fashion industry; Providing concrete tools to learn how and where to select innovative fibres in fashion, how to build an ingredient branding strategy in sustainability how to create and apply some good responsibility guidelines, how to structure a good sustainability report, how to structure a good business plan in sustainable fashion; Sharing inspiring business practices in both mass market, premium and luxury segment, for the different business models 	The course "New Sustainable Fashion" aims at sharing with the participants the most updated information and interesting examples on innovative business models in fashion & luxury. The course focuses on the driver of sustainability for the creation of shared value. Creating shared value in fashion means being able to answer the needs of many stakeholders: the environment, society, institutions, art, culture, territory and the consumers. A responsible fashion company has already started the long and complex journey of integrating ethics and aesthetics into the value chain, in constant balance with all the stakeholders.	The teaching model is composed as follows: - In classroom lectures - Case studies - Company visits - Project works - Sessions of Career orientation and/or reviews on business ideas. Traditional in-class lectures are alternated with case discussions, meetings with managers and other representatives of the business community, company visits, in class activities and project works. Career orientation will be provided to the students that aim at working in the industry; feedback to the business ideas will be shared with participants that are willing to become entrepreneurs.
<u>Management of</u> <u>the Sustainable</u> <u>Fashion Supply</u> <u>Chain</u>	Course topics : - The supply chain and the production process of the textile-clothing and leather supply chain, analysing the tools and	The course will show participants the concepts and tools suitable for rethinking	The course is a 120-hour practical training course (with weekend formula on





	techniques that guarantee compliance with responsible quality standards; - Sustainable materials , analysing their functional characteristics and the most	and managing the business processes and strategies of companies in the fashion supply	Fridays and Saturdays, / weekends in the presence and 4
	common certifications; - Ethics and responsibility in the fashion world , through the definition of new	chain in a sustainable way. It will be a current training course and will	online), at 360 ° on sustainable fashion, with professional
	policies, tools and procedures for their implementation. - Circular economy , identifying the possible	touch on issues considered increasingly fundamental and	teachers in the sector, 4 visits and the creation of an
	opportunities and methods of reuse or recycling, with a view to managing the end of life of the product also using eco design techniques and with the interpretation of	required by the fashion industries, such as the assessment of the environmental impact of	individual project work to make the training experience more and more
	LCA analysis. - Sustainable business fashion model : second hand, renting, upcycling.	production processes, compliance with the new dictates of the	updated and closer to the world of work. There will be 6
	 Sustainability measurement and objectives through management tools aimed at measuring performance and communicating it through a sustainability report. 	circular economy, knowledge of sustainable materials and new sustainable	modules and each module has a duration of 20 hours. Each module
		business models, certifications and traceability of products. Given that consumers are increasingly aware	includes exercises that will be carried out online and a final verification test.
		of the importance of environmental issues and are very critical of companies in the	
		fashion supply chain that ignore sustainable aspects, this course has been designed to meet	
		these needs and the strong demand from companies for	
		managers of the sustainable fashion supply chain.	
Out of Fashion	Module 1 - THE CULTURE OF SUSTAINABILITY: NEW BUSINESS MODELS	Out of Fashion is an advanced training	The course consists of seven modules of
	FOR SUSTAINABLE DEVELOPMENT The change in the global scenarios of the fashion and textile / clothing industry in the	course on Sustainability in fashion with the aim of building an overall	two days each, on Fridays and Saturdays, for a total
	post-Covid era. Innovative business models in fashion. Traceability, transparency, circularity. Collaborative consumption.	vision and a systemic approach to the priorities and problems	of 84 hours.
	Innovation and social impact. Introducing Inclusive Prosperity. The European scenario: the 17SDGs, Next Generation EU, the	present today in the textile and clothing sectors.	





Taxonomy Regulation as a facilitating tool for green investors, international and local financing opportunities for SMEs that focus on sustainability.

Module 2 - SUSTAINABILITY AS A PROCESS: MATERIALS, CHEMISTRY AND PRODUCTION

The sustainability of materials and processes, materials LCA. Analysis of statistical data on the consumption trends of world demand. Sustainable manufacturing processes. Good natural fibres and bad synthetic fibres. The role of innovation and the materials of the future: biodegradable polyester, biopolymers and biomaterials.

Module 3 - ETHICS AND TRANSPARENCY: A COMPETITIVE ADVANTAGE

The founding values of sustainable fashion, traceability of the supply chain, the opportunities and risks of blockchain technology, certifications, relocation and reshoring, the working conditions of workers and their contracts, the new European legislative context, sustainable management of supply chain.

Module 4 - DESIGN AFTER DESIGN

The aims of the new design in the culture of sustainable fashion: not only aesthetic result and functionality but also awareness of the duration, maintenance and environmental impact of production. The affirmation of digital manufacturing technologies and the active involvement of conscious consumers in the creation of business models alternative to mass production. On-demand production with company figures aware of new technological opportunities: from smart fabrics to parametric 3D printing.

Module 5 - REUSE, REPAIR, RECYCLE

The complex issue of recycling: definitions of recycling, downcycling and upcycling. The current limits of recycling and new technological experiments. The waste problem: from the linear system to the circular system; fashion recycling trends, zero waste design. The need for a systemic approach and partnerships at the local level: Starting from the observation of the great changes taking place the general reduction in consumption, the leap forward of e-commerce, the new European regulations - new strategies and visions will be proposed in the various modules that define the Out of Fashion training project, in order to transform and relaunch the fashion system starting from the Made in Italy vocation for quality.





the case of the Prato district. Circular design	
strategies and methods	
Module 6 - MADE IN ITALY BETWEEN	
HERITAGE AND INNOVATION	
The importance of the manufacturing	
tradition of Made in Italy in the fashion and	
textile sector. Heritage and Design: cultural	
identity as a narrative vehicle. The recovery	
of company archives as a strategic element	
for Italian companies. The Italian district	
supply chains	
Module 7 - THE NEW LANGUAGES OF	
SUSTAINABLE FASHION	
The communication of sustainable fashion:	
analysis of language and images in the media	
and social platforms. Marketing and	
greenwashing: the obligation of	
transparency. Communication to the	
responsible consumer. Communication of	
virtuous and ethical practices. Ethical and	
informed communication.	

5.1.2. Academic education opportunities

Higher education (bachelors and masters) programs	Topics within the identified program	Competencies gained by students	Teaching methods and didactic tools used within the course
Product Sustainability	Fashion Pillars:	Fashion Pillars:	Fashion Pillars -
Management at	 Project Management 	Didactical activities of	carried out through
MILANO FASHION	- Fashion Business Models	introduction to the	theoretical lectures,
<u>INSTITUTE (MFI)</u>	 Research Methods and 	knowledge of the fashion	seminars and
Duration: 1 year	Trends	industry, from its historical	exercises. Each
	 Italian Fashion System 	evolution and historical	module has a final
	- Fashion	criticism, to the	assessment exam,
	Marketing&Brand	predominant organizational	through a written
	Management	models, from the main	test or a
	- Fashion History	products' typologies and	presentation of a
	Fashion Processes	the instruments necessary	project.
	(Specialized courses)	to explore and know the	
	- Sustainability for Fashion	fashion market, and finally	Fashion Processes -
	- Supply Chain	up to the techniques of	carried out through
	Management, Digital and	project management.	lectures and direct
	Responsible Innovation	Fashion Processes:	testimony from
	- Fibers, Materials	Educational activities aimed	professionals and
	&Accessories	to the formation of specific	each module has a
	- Materials Innovation	competences in managing	final assessment
	- CSR Communication	key processes identified by	exam through a
		the three functional and	written test or the





	 Retail, Sustainability & BIO Architecture LCD (Clothing System Lifecycle Design), Theory Methods and Tools This course is accompanied by Field Projects, Enterpreneurship&Start-Up, Empowerment and Career Management; Internship and Final Thesis. 	professional areas of the master. The aim of the Master is to update and deepen tomorrow's managers what are the pillars inherent in the meanings of sustainability, the laws and regulations, the design approaches and the communication analysis tools so that it can lead the luxury fashion company to a greater awareness of its responsibility on the market. The goal of the Master is to provide the knowledge, skills and analytical tools necessary to the definition and recognition of a system-product-service system and sustainable process for luxury fashion.	presentation project by the students.
Sustainable Fashion	LEARNING MODULES:	The Master in Sustainable	This intensive
Master's program at	- Fashion Culture	Fashion ⁸² is an up-to-date	specialization
POLIMODA	- Brand Management &	program designed to shape	program is run by
Duration: 9 months	Fashion Sustainability,	Sustainability Managers,	resident teachers
	encompassing fashion	Circular Economy Managers	from the industry
	sociology, sustainable	and Fashion Diversity	with the direct
	fashion business models,	Managers.	involvement of
	sustainable design strategies,	Systems thinking, ethical	international
	cause-related marketing,	fashion, circular business	professionals.
	corporate social	models and standards,	International guest
	responsibility and fashion	eco-design, diversity and	lectures and two
	leadership;	inclusion are the latest	field trips to
	- Sustainable Production,	fashion buzzwords shining	production sites are
	including new materials,	a light on some of the most	part of the program.
	production technologies,	critical themes of the	Two main projects, a
	value chain management,	contemporary worldwide	Midterm Project and
	suppliers and innovative	agenda and are becoming	a Final Project, can
	textiles	increasingly accepted goals	become part of the
	- Global Economy, diving into	by fashion brands, luxury	portfolio students
	new trends, transparent	suppliers and non-profits.	present when
	corporate communications,	These key figures are	applying for
	digital transformation, future	responsible for innovative	internship and job
	consumer behavior &	materials research,	opportunities.

⁸² <u>https://www.polimoda.com/courses/master/sustainable-fashion</u>





	lifestyles, diversity & inclusion management, global market ethics, sustainable businesses and start-ups. Coupled with the passion and desire to change the status quo, Sustainable Fashion opens the doors to job roles such as Sustainability Managers, Circular Economy Managers, Diversity Managers, Ethical Trade Managers, Sustainable Business Managers, Supply Chain Directors, Corporate Social Responsibility Managers, Social Activists and Fashion Writers.	upcycling, recycling, traceability, reporting, transparency, community engagement, environmental health as well as the quality of fashion products and everyday life.	Lessons take from April to December and amount to a total of 700 contact hours. Thereafter, there is the possibility of completing the program with an internship at a fashion company, leading to the overall obtainment of 80 credits. English language proficiency and attendance are required. Candidates are eligible and selected after the admission process. Upon completion of the Master, students will be automatically given the possibility to partake in the <u>Polimoda Talent</u> program.
Second level Master's Degree in Fashion	Sociology of cultural processes (and the	The main learning objective of this course is to design	The educational path of the Academic
Sustainability &	communicational and social	new professional figures	Master in Fashion
Industry Evolution Duration: 1 year	perception effects of the theme of sustainability).	aware of responsible	Sustainability & Industry Evolution is
Duration: 1 year	History of fashion, to analyse	innovation processes across the economic,	divided into
	recent history and the	environmental and social	modules, through
	protagonists and pioneers of	fields.	theoretical and
	this theme. Type of materials , which is	At the end of the Academic	practical lectures, seminars with
	of decisive importance in	in Fashion Sustainability &	experts and
	providing, both for clothing	Industry Evolution,	professionals in the
	and accessories, technical	participants will be able to	sector, research and
	and formal information on	pursue a professional career in fashion	design laboratories,
	fibres, materials and production processes.	companies in CSR	visits to events, exercises, final
	The culture of fashion	(Corporate Social	assessment (Final
	materials offers technical	Responsibility) and in the	Work) and
	and theoretical skills on the	supply chain, they will also	internship. At the
	culture of sustainable	be able to deal with	end of each module /
	materials (with particular	responsible innovation and	project, students
	reference to eco design) and consists of lectures with	operate as consultants on a global level.	undertake summative
L			Summative





exercises aimed at settling	assessment fo
the contents on display.	acquisition of me
Design system investigates	credits.
the project area by working	
on innovation in process	
improvement, on the	
construction of a circular	
model and design of	
sustainable supply chain	
processes for a company.	
The design of	
professionalism integrates	
the skills acquired while	
others are more relevant to	
economic and market	
processes, providing	
additional important tools	
for understanding corporate	
culture.	

5.2. Germany

5.2.1. VET educational opportunities in Germany

VET programme	Topics and competencies within the identified program	Link to the GIF topics/relevance for the project	Didactical tools and training materials used within the program
Sustainability and textile	Sustainability in the textile	The seminar provides a	The course is a 1
<u>technology</u>	 and clothing industry What is sustainability LCA - Life Cycle Assessment Market figures Biopolymers and their properties Overview of bio-based materials Overview of new raw materials Production, fiber properties, areas of application Recycling of textiles Definition in waste management Processing chain of textile waste 	basic understanding of sustainability in the textile industry with an overview of the current state of the art. The seminar facilitates the evaluation of recycling opportunities, provides technical vocabulary, and gives inspiration for corporate sustainability.	day seminar.





- Challenges	in textile recycling		
- Practical ex	, .		
workshop			
· · · · ·	e value chains	In this seminar, the	The 30-hour
assessment and sustainable - Relevance		complexity of value	seminar is
design decisions	or design	chains is conveyed. Thus,	consistently
	and emissions	the participants open up	dialogue-oriented
	of sustainable	the relevance of design	and combines
-	and consumption	decisions along the entire	input, discussions,
	of the choice of	value chain in terms of	practical exercises
	d manufacturing	nature and resource	and guided reading
processes		consumption, circularity	in a varied way.
processes		and emissions. Different	Participation on
		strategies of sustainable	site at the ecosign
		production and	or, due to corona
		consumption (circular	conditions, also
		design, efficiency,	digitally via zoom
		consistency, sufficiency,	possible
		etc.) as well as their	possible
		conditions and limits will	
		be examined and related	
		to the work of designers.	
		The course also conveys	
		the relevance of the	
		choice of materials and	
		manufacturing processes	
		and their significance for	
		a circular value creation.	
		The seminar work is	
		accompanied by specialist	
		readings, individual and	
		group exercises,	
		preparation and	
		follow-up. Participants	
		apply the skills they have	
		learned in the context of	
		a case study by analyzing	
		a concrete product or	
		service on the basis of the	
		criteria they have	
		developed.	
I		l uevelopeu.	

5.2.2. Academic education opportunities in Germany

Higher education (bachelors and	Topics within the identified program	Competencies gained by students	Teaching methods and
masters) programs			didactic tools





			used
			course
Sustainable Fashion	- Basics of design: shape and color	The bachelor's	The activities
(B.A.) at the Business	- Fundamentals of design: body and space	program Sustainable	are divided into
& Law School in Berlin	- Digital Design: Visualization	Fashion develops	General
Duration: 3 years	- Digital Presentation Techniques	sustainable solutions	Professional
	- Digital Portfolio Design	on a design,	Competence,
	- Sustainability in the textile chain: fibers	theoretical and	Specific
	and textiles	organizational basis. In	Professional
	- Sustainability in the Textile Chain:	addition to the basic	Competence
	Fabrication and Recycling	study of design in the	(Sustainability),
	- Sustainability marketing	subjects Design and	Professional
	- Basics of processing	Visualization, Design	Action
	- Pattern Drafting	Drawing or Collection	Competence
	- Collection development	Development,	and Methods
	- Cut construction: manual cut	theoretical-ethical and	and Social
	construction and draping	management-oriented	Competence.
	- Cut construction: CAD	competencies are	The combined
	- Fashion history and theory	developed in the	theoretical and
	- Fashion sociology and ethics	modules Sustainabilty	practical
	- Supply Chain Management	in Supply Chain	training takes
	-Brand Building	Management, Brand	place in the
	-Global Product and Quality Management - Scientific work	Management or international Product	university in
			presence.
	- Creativity methods	and Quality	
Sustainability in	1st Somostor:	Management.	The program is a
Sustainability in Eashion and Creative	<u>1st Semester:</u>	With an	The program is a
Fashion and Creative	Design strategies + Sustainability:	With an interdisciplinary	full-time on-site
Fashion and Creative Industries (M.A.) at	Design strategies + Sustainability: -Strategic Foresight and Sustainable	With an interdisciplinary structure, the Master's	full-time on-site master's degree
Fashion and Creative Industries (M.A.) at the AMD Akademie	Design strategies + Sustainability: -Strategic Foresight and Sustainable Digital Transformation	With an interdisciplinary structure, the Master's covers sustainable	full-time on-site master's degree for students
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability: -Strategic Foresight and Sustainable Digital Transformation - Sustainable Design Concepts	With an interdisciplinary structure, the Master's covers sustainable design strategies and	full-time on-site master's degree for students who wish to
Fashion and Creative Industries (M.A.) at the AMD Akademie	Design strategies + Sustainability: -Strategic Foresight and Sustainable Digital Transformation - Sustainable Design Concepts -Fashion and Society	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of	full-time on-site master's degree for students who wish to specialize in the
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability: -Strategic Foresight and Sustainable Digital Transformation - Sustainable Design Concepts -Fashion and Society Business + Sustainability: - Business	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization,	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability: -Strategic Foresight and Sustainable Digital Transformation - Sustainable Design Concepts -Fashion and Society Business + Sustainability: - Business Ethics in Changing Markets	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of	full-time on-site master's degree for students who wish to specialize in the
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability: -Strategic Foresight and Sustainable Digital Transformation - Sustainable Design Concepts -Fashion and Society Business + Sustainability: - Business	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-Media	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR-Working with Sustainable Fashion	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials,	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability: -Strategic Foresight and Sustainable Digital Transformation - Sustainable Design Concepts -Fashion and Society Business + Sustainability: - Business Ethics in Changing Markets - Circular Supply Chain Managemenet - Sustainable Marketing and Social-Media Production + Sustainability: - Sustainable Fibres and Textiles - CSR -Working with Sustainable Fashion Companies	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR- Working with Sustainable FashionCompanies	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR- Working with Sustainable FashionCompanies2nd Semester:Design strategies + sustainability:	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR- Working with Sustainable FashionCompanies2nd Semester:Design strategies + sustainability:- Design Concepts	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing instruments, to	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR- Working with Sustainable FashionCompanies2nd Semester:Design strategies + sustainability:- Design Concepts- Responsibility Product Development	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing instruments, to arrange value-added	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR-Working with Sustainable FashionCompanies2nd Semester:Design strategies + sustainability:- Design Concepts- Responsibility Product Development- Innovative Textiles and Circular Economy	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing instruments, to arrange value-added chains in an ecological	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR- Working with Sustainable FashionCompanies2nd Semester:Design strategies + sustainability:- Design Concepts- Responsibility Product Development- Innovative Textiles and Circular EconomyBusiness + Sustainability:	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing instruments, to arrange value-added chains in an ecological and social manner, the	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR- Working with Sustainable FashionCompanies2nd Semester:Design strategies + sustainability:- Design Concepts- Responsibility Product Development- Innovative Textiles and Circular EconomyBusiness + Sustainability:- Sustainable Business Psychology and	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing instruments, to arrange value-added chains in an ecological and social manner, the functioning of	full-time on-site master's degree for students who wish to specialize in the field of
Fashion and Creative Industries (M.A.) at the AMD Akademie Mode & Design Berlin	Design strategies + Sustainability:-Strategic Foresight and SustainableDigital Transformation- Sustainable Design Concepts-Fashion and SocietyBusiness + Sustainability: - BusinessEthics in Changing Markets- Circular Supply Chain Managemenet- Sustainable Marketing and Social-MediaProduction + Sustainability:- Sustainable Fibres and Textiles- CSR- Working with Sustainable FashionCompanies2nd Semester:Design strategies + sustainability:- Design Concepts- Responsibility Product Development- Innovative Textiles and Circular EconomyBusiness + Sustainability:	With an interdisciplinary structure, the Master's covers sustainable design strategies and various other areas of specialization, including sustainable production and sustainable business strategies. Contents like sustainable design developments and trends, innovative materials, technologies of production, and marketing instruments, to arrange value-added chains in an ecological and social manner, the	full-time on-site master's degree for students who wish to specialize in the field of





	 Future-orientated Technology and Innovative Management Sustainable Brands and Social-Media Production + Sustainability: Fashion and Product Management Innovative Textiles and Circular Economy Ecosystems and Economics <u>3rd Semester</u> Master Tutorials: 	labor conditions are included.	
	 Design Concepts Supervision of Master's Project Portfolio Coaching Business Plan Sustainable Entrepreneurship and Financing Master's Thesis 		
Sustainable Textiles (M.Eng.) at Hof Hochschule in Münchberg Duration: 1,5 years	 Textile Technology / Textile Chemistry: Advanced Textile Production Advanced Textile Chemistry Effect and Process Auxiliaries Resource Efficient Application Technologies Management/ International Law: Legal Framework and Digitalization of the Textile Value Chain Sustainable Project Management Sustainability and Renewable Products: Circular Economy/ Certificates and Eco Labels Sustainable Functionalization and Surface Modification of Textiles 	The Master's provides students with all the skills needed to develop and commission (more sustainable) processes in textile chemistry. Solutions for non-hazardous alternative chemicals are developed and production processes are optimized. Research is also conducted on innovative finishing processes and	The prerequisite for the full-time master's program is a bachelor's degree in textile engineering. The program is taught in English
	 Renewable Products for the Textile Industry (Fibers, Auxiliaries, Dyestuffs) Electives Project Simulation Sustainable Products for Medical or Hygienic End-Use Simulation and Optimization Master thesis and internship 	materials.	

5.3. Romania

5.3.1. VET educational opportunities in Romania





VET programme	Topics and competencies	Link to the GIF	Didactical tools a
	within the identified	topics/relevance for	training materials used
	programme	the project	within the program
<u>"Salomeia Truta" Fashion</u>	The Institute offers multiple	The Institute of	-practical hands-on work
<u>Institute</u>	courses for adults, as well as	Fashion offers	in patternmaking
	children. These include a	comprehensive,	-applied work on own
	fashion design course, a	qualified courses into	ideas and measurements
	patternmaking course, a	all the topics relevant	-multiple variations of
	tailoring course for men and	for a fashion designer,	patterns
	women and a styling course.	tailor or stylist. Some	-own collection
		of the courses also	development
	Fashion design: fashion	include lessons about	-collaboration with other
	illustration, artistic anatomy,	the types of fabrics	students on projects
	color theory, technical	and fibers, therefore	-developing ideas croquis
	drawings, costume history,	providing a more	and designs from scratch
	collection making	general understanding	-practical work taken step
		of materials to the	by step with appropriate
	Patternmaking (manual and	students. As for	guidance
	digital): 5 types of basic	patternmaking, they	-final applied project at
	patterns, pattern	have an innovative	the
	modifications and	approach to this by	end of each course
	transformations, pattern	teaching their	-learning by doing
	grading, Gemeni CAD	students to work from	-in-person teaching
		scratch to their own	
	Sewing & Tailoring: fiber and	measurements, rather	
	material types, types of	than use pre-set	
	manual and automated	templates, which	
	stitching, measurements, 5	offers them deeper	
	basic patterns, pattern	understanding and	
	modifications	flexibility. On another	
		hand, the innovative	
	Fashion styling: color theory,	approach also consists	
	silhouettes, fashion styles,	of teaching students to	
	textures, weaves and knits,	use the Gemeni CAD	
	trends, staple clothing	program for digital	
	pieces, shopping, styling,	patternmaking.	
	makeup and hairstyling		
Innovative design	The course covers topics of	The course is highly	-online learning platform
practices for achieving a	sustainable textile design. It	relevant for the GIF	-theoretical knowledge in
new textile circular	includes:	project since it is a	the form of digital study
sector-Design4Circle	Nedule 1 Justice dustion to	very comprehensive	manuals
	Module 1 – Introduction to	course about	-self-study of additional
	circular economy Introduction to Circular	sustainable textile	resources
		design and	-glossary of relevant terms for each module
	Economy; Concepts and	production. It not only contains the theory	
	principles; Current state of		-final digital examinations for each module
	policies addressing Circular	divided in 7 chapters that include all areas	
	Economy		-presentation of numerous relevant
		of the lifecycle and	
		production of textiles, but also informs the	examples
		but also morms the	





Module 2 - Sustainability challenges in the textile and fashion industry Alarming trends in textile and leather industry; People health and safety; Waste, package and environment according to the national and EU regulations; Ethical production. Module 3: Materials For A Circular Economy Sustainable textile and non-textile materials; Textile waste as raw material for upcycling; Recycled textiles Module 4: Design For A Circular Economy Product life cycle, eco-design principles Module 5: Manufacture for a Circular Economy Manufacture processes in fabric production; Manufacture processes in garment production; Environmentally friendly production; Clean technologies; Services to support long life Module 6: Recycling Textile recycling; Textile waste collection, sorting and preparation for recycling; Textile recycling; Textile waste collection, sorting and preparation for recycling; Technology for textile recycling Module 7: Business Management In A Circular Economy Entrepreneurship and new business models for circular	students about the latest innovations and developments in the field and offers lessons about the management of a business in the field. The course is highly detailed and technically-oriented and can be a great learning opportunity for the GIF project.	
economy; Marketing and user-centred approaches;		





	System thinking and networking; CSR;		
	Sustainability performance		
	indicators and guidelines		
<u>Circular Economy</u> <u>Innovative Skills in the</u> <u>Textile Sector – ECO TEX</u>	Module 1: Sustainability management Sustainability Definition and Policies; Sustainable Development (Business Models); Application of Certifications and Policies; Sustainability Assessment; Internal Sustainability Module 2: Environmental Performance Environmental Performance Definition and Environment's Global Metrics; Environmental Performance Manufacturing and Remanufacturing Systems;	This course addresses the managerial and corporate responsibility side of textile production, however, with a very strong sustainability focus. They explain circular economy practices, sustainability assessments, environmental performance and circular business models. The course topics are relevant for the GIF project as they	-online teaching platform -video lessons with voice explanations -theoretical online lessons -many relevant examples from the field (case studies) -written digital study manuals -digital practice quizzes at the end of each unit
	Remanufacturing Systems; Best Available Techniques (BAT) in the Textile sector; Textile's Environmental Assessment – examples; Environmental Legislation for the Textile sector	approach these aspects from the point of view of a business rather than an individual designer/technician. It addresses already	
	Module 3: Corporate Social Responsibility CSR Definition and scope; Fundamentals of CSR; Organizational culture and CSR; Implement and Evaluate CSR; Occupational Health and Safety Legislation in the Textile sector Module 4: Circular Economy Occupational Health and	developed professionals in the field with degrees in Environmental Policy, Law, Business or Public Administration, Engineering, Textile Engineering; especially in a managerial position.	
	Safety Legislation in the Textile sector; Identification of Environmental Legislation for Waste Management; Circular Economy in the Textile sector; Eco Design; Circular Business Models for the Textile sector		





5.3.2. Academic education opportunities in Romania

Higher education (bachelors and masters) programs	Topics within the identified programme	Competencies gained by students	Teaching methods and didactic tools used within the course
<u>"Aurel Vlaicu"</u>	Fundamental courses include:	-creation of	-Theoretical courses
<u>University, Arad –</u> Fashion Design BA	art and costume history; artistic anatomy; study of	products/concepts based on performed research	(lecturing theory to students about a certain
Duration: 3 years	drawing, color, composition;	-understanding the material	topic – usually contains a
, , , ,	3D modelling; marketing and	components of the fashion	text support in the form of
	management; technological	product, its architecture and	training manuals and
	transposition; scenography;	the relationship between the	digital presentations)
	specialty technologies	project and the product -knowledge of the stages of	-Seminaries (in-depth study and understanding
	Specialty disciplines (to	technological flow and	of a certain topic
	choose 12 out of 18) include:	production	combined with practical
	product design, graphic	-understanding the size of	exercises/examples)
	design, environmental design,	the product system, and all	-Laboratories (practical
	ornamentation, composition, fashion illustration techniques,	the processes of product promotion, through	individual work of the student with the teacher's
	printing techniques, pedagogy,	communication techniques	guidance on a certain
	accessory and footwear	-the designer will think of the	project)
	design, eco-design, media	clothing product as a	
	design, lighting design	three-dimensional space	
	GIF-related topics:	belonging to the physical body, as an object	
	This University provides the	characterized by functions of	
	opportunity for the student to	use, while integrating	
	learn about sustainable	symbolic and cultural values	
	fashion through a specialty	into the product	
	optional eco-design discipline. They also teach students	-the ability to work in different phases within a	
	about the latest innovations in	research project, such as the	
	the field during the specialty	elaboration and definition of	
	technologies course, as well as	the lines and tendencies of a	
	preparing them for the future	collection, the technical	
	developments of the design sector by teaching 3D	development of the product, up to the product	
	modelling throughout the	management	
	whole 3 years of study.		
	-the focus on sustainable		
	development and		
	environmental protection is soft in this program, however,		
	if the student is interested, the		
	possibility exists		





(Cheershe	In double courses includes	interpreting new montest	Theoretical cour
<u>"Gheorghe</u>	In-depth courses include:	-interpreting new market	-Theoretical cour
Asachi" Technical	Functional structuring of	trends and translating them	(lecturing theory ιυ
University of lasi	products, constructive design	into technical solutions for	students about a certain
-Clothing design	of clothing, CAD systems for	constructive design	topic – usually contains a
and modeling MA	textile manufacturing,	- approaching the design and	text support in the form of
Duration: 2 years	advanced technologies for	manufacture of clothing	training manuals and
	ready-made clothes, costume	products with particular	digital presentations)
	composition, product design	functions	-Laboratories (practical
		-addressing the	work of the student with
	Synthesis courses include:	ever-emerging challenges of	the teacher's guidance)
	Fashion shape modeling, the	the market	- Practical project
	fashion industry, quality	-the ability to keep up with	(individual applied,
	certification in garments,	innovations in the fashion	practical assignments in
	project management, clothing	and textile sector	the form of graded
	lifecycle, entrepreneurship,	-starting and managing a	projects) – a strong focus
	sustainability in fashion	business in the fashion and	in this course
	· ·	textile sector	
	GIF-related topics:		
	This program is focused on the		
	technical aspect of clothing		
	production. It includes		
	mastering 3D modelling		
	programs (which are a		
	technology for the future of		
	sustainable fashion), as well as		
	entire compulsory courses		
	about the clothing lifecycle		
	steps and sustainable fashion		
	production techniques.		
	Student gets a full		
	understanding of the		
	production processes, the		
	impact of the designing stage,		
	optimal design techniques and		
	textile manufacturing –		
	essentially a clothing engineer		
	training.		
	- a highly technical, practical		
	and applied program with a		
	clear sustainability focus		





<u>"Gheorghe</u>	Domain disciplines include:	- create environmentally	-Theoretical cour
Asachi" Technical	Advanced textile polymers,	friendly textile technologies	(lecturing theory ισ
University of lasi -	functional textiles, textile	and products	students about a certain
Eco-design in	quality management, design	- creation of innovative,	topic)
Textile Finishing	and color elements, modern	inspiring and highperforming	-Seminaries (in-depth
MA	methods of textile	technologies and materials	study and understanding
<u>(in English)</u>	investigation	- change of the old	of a certain topic
Duration: 2 years		technologies with new,	combined with practical
	Specialty studies include:	non-polluting ones	exercises/examples)
	Biotechnological processes in	- knowledge about all the	-Laboratories (practical
	textile finishing, ecotoxicology	latest sustainable textile	work of the student with
	of textile finishing, specialty	materials: organically	the teacher's guidance)
	technologies and machinery,	produced versions of	- Individual studies (hours
	performance pigments,	commonly used textile fibres,	of individual study and
	surfactants and colorants,	sustainable artificial fibres or	research required for each
	digital textile printing, practical	the very new synthetic fibres	student to carry out their
	internship	derived from renewable	projects)
		resources, such as Polylactic	- Practical internship
	Complementary disciplines:	acid fibres	(working for a number of
	Cybermarketing and	- responsible with	weeks/months in a
	e-commerce	systematical reduction of	company in the industry)
		product's exposure to	
	Relation to GIF topics:	current and anticipated	
	This is a textile engineering	future environmental	
	master's that has eco-design	compliance risks and	
	and sustainability at its core.	liabilities	
	They teach their students all	- development of innovative	
	about the engineering aspects	sustainable technology	
	of textile finishing and dyeing, as well as elements of design	products and systems - exploit and harness of new	
	and all about how to make	smart technologies for new	
	textile finishing more	business developments and	
	sustainable with the latest	opportunities in the field of	
	innovations	textiles	

5.4. Greece

5.4.1. VET educational opportunities in Greece

VET program	Topics and competencies within the identified program	Link to the GIF topics/relevance for the project	Didactical tools and training materials used within the program
VET of the	It evaluates the linearity and	The aim of the program is to provide	Section 1 -
University of	circularity of various products and	the necessary knowledge on the basic	Introduction
<u>West Attica -</u>	services from the perspective of:	principles of the circular economy, the	to the
<u>Circular</u>	a) the consumer, b) a firm	existing legislation and new legislative	circular
Economy:		developments, the need to move from	economy





Transition and Strategies - Department of Industrial Design and Production Engineering	interested in supplying them, and c) the firm that provides them. Identifies opportunities to apply the basic principles of the circular economy to various products and services, at the level of design, production, choice of materials, end-of-life management. Identify opportunities to apply the basic principles of the circular economy in a supply chain. Introduces to other stakeholders the concept of the circular economy, the need for transition and the benefits of moving to a circular economy. Identify and evaluate the factors that prevent businesses and different sectors of economic activity from transitioning to a circular economy.	the linear to the circular economy, the benefits of the implementation of the circular economy, the efficient use of resources, the increase of efficiency in the use of resources, the introduction to the principles of circular design and circular production of products and services, logistics/reverse logistics, the application of circular principles in the supply chain, the application of the circular economy in the supply chain, the implementation of the circular economy in the supply chain and the use of resources.	Section 2 - Priority axes in the circular economy and materials innovation Section 3 - Circular value chains and supply chains Section 4 - Circularity in practice Section 5 - Managing the transition to a circular economy Module 6 - Case study and recording of conclusions
Athens Fashion Club - Seminar "Sustainability in Fashion & Sustainability Strategies" Duration: 15 hours	They educate on new sustainable fashion business models and set an example themselves by promoting their own collections, Mad Flax and Maria Vytinidou Eco Luxury Brand, focused on the use of ecological materials and Upcycling and Zero waste techniques. Topics covered: The seminar will cover the following topics: • Basic Principles of Sustainability • Creating a Corporate Sustainability Strategy • Design for Sustainability - Sustainable Design Strategies	Through this seminar, the Designer and the Fashion Entrepreneur in general will fully understand what exactly Sustainable Fashion is, what are the benefits and what he/she should do in order to acquire a "Green Identity" for himself/herself and his/her business. We'll go into quite a lot of very useful Tools that the Fashion Professional can use in every area, from Design, Manufacturing, Business Culture, Marketing to Staff and Facilities, even the Events they hold, etc.	Online Seminar - This seminar is addressed to everyone involved in the fashion industry who wants to turn towards Eco Fashion (Sustainable, Sustainable or Green Fashion) and become aware and active in this global trend.





Sustainable Fashion Summer School, The Athens University of Economics and Business and Fashion Revolution Greece Duration: 3 weeks	 People (of our Company, our Community, our Supply Chain) Enterprise culture for employees and community people. Our Supply Chain. Ethical Work and Fair Trade - Tools to add Ethical fashion Slow Fashion - Tools and Organizations Sustainable Materials - Materials Based on Circularity Sustainable Materials Guides and Ranking Resources Materials Processing and Manufacturing Application of Sustainability in Production Facilities Jewellery, Accessories, Footwear Sustainable Facilities (Buildings and Offices) Packaging Transport and Logistics Customer Service and Problem Solving End of Use, Reuse and Recycling. Event Planning and Production. Communication and Strategies Circularity: what the experts say The curriculum incorporates all the latest innovations in the sector of fashion through four main thematic areas: Sustainable Design & Materiality New Business Models, Circular Manufacturing & Logistics Digital Fashion & FashTech Hackathon, Heritage & Ethics 	The Athens University of Economics and Business and Fashion Revolution Greece, inaugurate the first Sustainable Fashion Summer School in collaboration with leading Universities and sustainable fashion institutions in the USA, Europe and Latin America. Over 25 top educators from institutions from the U.S. and Europe – for example, the Fashion Institute of Technology, the Pratt Institute, the University of Exeter, St. Martins, London College Fashion, the Institute of European Design – will travel with us for the 2 used educational	the 3-week educational program
Revolution Greece Duration: 3	Manufacturing & Logistics 3. Digital Fashion & FashTech Hackathon, Heritage & Ethics	Over 25 top educators from institutions from the U.S. and Europe – for example, the Fashion Institute of Technology, the Pratt Institute, the University of Exeter, St. Martins, London College Fashion, the Institute	





networks necessary to thrive as fashion
revolutionaries.
The Fashion Revolution Summer
School together with teachers,
professionals, and students, travelled
on 6-26th of June , across Greece
from Thessaloniki, Kilkis, Corfu,
Kalamata, Mani and Athens, where
they visited fashion venues of the
entire supply chain from raw material
production to circular manufacturing
for the application of sustainable
practices in the sector, archaeological
sites and monuments of cultural
heritage. They received a holistic
educational experience from the
experts of the field and will gain
knowledge and experience in the
field of textiles and circular
construction in Greece.
The Summer School aimed at
professionals from the clothing,
footwear and textile industry but also
to designers, researchers, artists,
architects or students that want to
upscale to sustainable, circular and
ethical fashion processes that will
reshape global fashion.

5.4.2. Academic education opportunities in Greece

Higher education (bachelors and masters)	Topics within the identified program	Competencies gained by students	Teaching methods and didactic tools used within the course
International Hellenic University, department of Clothing Design and Technology	It provides academic knowledge and skills at undergraduate level, in the field of creative design in Clothing, following the model of corresponding European undergraduate level programs of study. - It cooperates with the production units of the	The objectives of the curriculum of the Department of Creative Design and Clothing are achieved through three areas of Art & Science: fashion design, clothing technology & fashion marketing.	The Clothing Design strand includes knowledge & skills related to Art & Clothing History, Fashion Semiotics, Body Metrics, Artistic Dimension of Design. In the Clothing Technology strand, knowledge & skills related to the Technology of materials, processes and
	Clothing Market and institutions related to its field of knowledge.		procedures, Quality Control, and CAD/CAM Technology for the creation





	· · · · · · · · · · · · · · · · · · ·		
	- It uses modern		of Fashion pr
	technologies in education.		included.
	- It follows international		In the Fashion Marketing
	developments in the		strand, knowledge related
	scientific and academic		to Market and Consumer
	field and incorporates them		Research, Marketing, Brand
	in a dynamic way in the		Management, Brand
	educational process &		Creation and Management,
	Research.		Promotion and Retail
	- Participates in events and		Presentation of Fashion
	competitions with the aim		products are included
	of developing students'		
	creativity and keeping them		
	in constant contact with		
	the fields of art and		
	technology.		
	- Contributes through its		
	curriculum and Research to		
	sustainable development		
	and circular economy.		
	- It collaborates with higher		
	educational institutions in		
	the country and abroad.		
	- It has succeeded in		
	attracting students from		
	the Balkan and		
	international area and		
	looks forward, in the		
	future, to providing		
	education in a foreign		
	language (English)		
Department of Industrial	The object of the	Following the completion	The Five-year Programme
Design and Production	Department of Industrial	of studies, the graduate	of the Department of
Engineering of the	Design and Production	Industrial Design and	Industrial Design and
University of West Attica.	Engineering is the design of	Production Engineer	Production Engineering of
Industrial Design and	modern systems and	possesses knowledge,	the University of West
Manufacturing Engineer	services following the best	abilities and skills that	Attica has been drawn up
	approaches in the	allow them to:	taking into consideration
	interdisciplinary field of	 to successfully respond 	the guidelines provided by
	design, creatively	to the competitive	the Hellenic Authority for
	combining knowledge and	working environment	Higher Education (HAHE)
	methodologies from a wide	with exceptional career	and aims at:
	range of sciences and	prospects;	• the supply of high-quality
	emphasizing the use of new	• to successfully pursue	tertiary education at
	technologies for the design	the Postgraduate Study	both theoretical and
	and production of	Programme at the	laboratory level;
	innovative products.	higher-education	• the continuous
	The purpose of the	institutions of Greece	adaptation of the
	Department of Industrial	and abroad.	educational subject to





	Design and Production		the new de
	Engineering is to produce		science, research and
	graduates who will be able		technology;
	to creatively use new		• the fostering of
	technologies, science and		specialized abilities to
	art to design solutions in		combine sciences,
	the form of easy-to-use and		technologies, methods,
	functional Products,		materials and properties
	Processes and Systems in		in order to develop
	all production sectors. The		innovative products and
	Department responds in		services;
	this way to the current and		• the shaping of rational
	emerging needs for		thinking and analysis to
	executives in industry and		solve practical problems
	business in global		and apply the theoretical
	competition. The		knowledge to the
	Department of Industrial		established and modern
	Design and Production		industrial methods;
	Engineering of the School		 providing a solid and
	of Engineering of the		extensive scientific
	University of West Attica		background for the
	has the" Laboratory of		purpose of mobility and
	Design and Development		flexibility in the modern
	of Knitted Innovative		competitive international
	Textiles and Clothing		environment, meeting
	Products (SAPKE).		the needs of the labor
			market;
MSc - Postgraduate Studies	-	In particular, the mission of	The main objective of the
<u>Program</u>	Postgraduate Program	the MSc is to train	Postgraduate Program
"New Textile Materials and	"New Textiles and	graduates (Graduates -	"New Textiles and
Technologies in Fashion	Technologies in Fashion	Diploma holders) of	Technologies in Fashion
<u>Design"</u>	Design" is the study of	Technological, Scientific	Design" is the study of
	management strategies and	and Economic Higher	management strategies and
	new technologies in	Schools (Universities and	new technologies in
	Fashion Design. Students	Technical Universities).) in	Fashion Design. Students
	deepen the knowledge of	the basic principles of	deepen the knowledge of
	new technologies,	textile industry processes	new technologies,
	materials and processes in	and technology, quality	materials and processes in
	Fashion Design.	control and the theoretical	Fashion Design.
	The mission of the MSc	principles governing it,	
	"New Textile Materials and	technology and	
	Technologies in Fashion	applications of new	
	Design" is to further	materials, design	
	advance scientific	methodology, product	
	knowledge and technology	development and advanced	
	in the broader field of the	methods of application of	
	MSc's subject matter, to	dyes and electronics in the	
	promote research and	clothing industry and	





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 development of innovative methods, processes and products in the area of Materials and Fashion Design, taking into account the development needs of the country and the companies in the sector. Methodology of Design and Development of Clothing Products Technology and Innovation in Fashion Design Physical and Chemical Processes in Modern Textiles Quality Control of Fabrics and Textile Physics Applications of New Textiles Color Science and Digital Printing Applications of Electronics in Multifunctional Garments Strategy and Finance of Clothing Businesses Fashion Product Marketing Research Methodology and Research Project Management Postgraduate Diploma Thesis 	fashion design, modern management strategies and finance of clothing companies, standardization and systems analysis, planning of business resources, d Finally, training in research methods and documentation of the results of the research effort will be sought	





5.5. Spain

Higher education	Topics within the identified	Competencies	Teaching methods and didactic tools
(bachelors and masters)	program	gained by	used within the course
(,	P 8	students	
Slow fashion next	This Networking Forum is	1 · Know the	Methodology of courses: Exclusive
Professional forum on	where the community of this	origin of the	Methodology Cycled D
continuing training in	organization is meeting	materials and	It is a learning process in three steps,
sustainable fashion	(former students, friendly	fabrics most	three "D"s: Wake up, Discover and
	brands, collaborators,) as	currently used	Develop, which help to easily
	well as people with values and	in the textile	integrate the key concepts needed to
	businesses with a purpose	industry and	understand what sustainability really
	who want to join and be an	the	means and be able to apply it in a
	active part in the transition	sustainable	concrete way to a business, company
	towards a fashion with	options	or organization. resume.
	positive impact.	available in the	WAKE UP: This starting point offers
		market from	quality information on the current
	In addition to having	our expert	global context in which we are
	continuous and updated	teacher.	immersed.
	online training from top-level	2. Discover the	
	experts in the sector,	qualities of	After an analysis of the best reports
	consultation resources such as	each of the	from the best consultants, the
	guides, recommended stamps	traditionally	relevant data and conclusions have
	and our video library, and	used fibers as	been extracted to understand how
	build professional networks.	well as those	issues as current as the scarcity of
		of the new	resources affect and can affect a
	Aimed at any professional and	options	company. The organized information
	student from the different	resulting from	is presented to make it easy and fast
	points of the fashion industry	technology	to assimilate so much information.
	value chain: entrepreneurs	and scientific	
	and future entrepreneurs of	progress,	This first step also helps you to easily
	sustainable fashion brands and	because in	understand what sustainability
	initiatives, suppliers of	order to	means and how it is related to
	materials, workshops, pattern	achieve a	fashion, to develop a 360° vision and
	makers, garment makers,	sustainable	to quickly visualize the social and
	designers, distributors,	future, science	environmental impacts of the sector
	communicators, among	and fashion	as well as to detect where you have
	others, that they have	must go hand	to:
	sustainability and ethics at the	in hand.	
	heart of their business.	3. Know	DISCOVER : Depending on the course
		first-hand	chosen (Introduction to Sustainable
		professional	Fashion, Sustainable Fabrics,
		Sustainable	Ecodesign Strategies) this stage is
		Suppliers.	where the student is helped to find
			solutions to those impacts that have
			been detected in the first phase. The

5.5.1. VET educational opportunities in Spain





	1		
		4 · Solve your	most innovative propos
		doubts in this	and sustainability issues are explored
		regard live.	in their different dimensions. Words
			such as circular economy, ecodesign
			strategies, sustainable innovation,
			upcycling, sustainable materials,
			among many other concepts, will be
			words loaded with meaning for the
			student after the courses.
			student after the courses.
			While the first stage focuses on data, here we talk about the different solutions that exist today to help students meet the challenges that
			their company or project will have to face. They help you rethink how to design more intelligently, how to
			choose the best materials, how to follow the principles of ecodesign to ensure that your product complies with
			DEVELOP: In this third stage of the
			methodology, practical exercises are proposed with coaching and neuroscience methodologies that help to integrate what has been learned and make learning "accelerated, enjoyable and experiential".
Slow fashion next	Objective of this course		
Online course on	The objectives that you will		
sustainable materials for	achieve as we progress		
sustainable fashion and	through the agenda are:		
fabrics	· Learn the key concepts of		
7 weeks	sustainability when choosing		
	the best materials for your		
	collections and fashion and		
	textile products.		
	• Discover the qualities of the		
	different fibers.		
	· Differentiate materials and		
	how to use them. · Know which materials are the		
	• Know which materials are the most suitable for each		
	product.		
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	· Where to get them.		-
	· Discover innovative and		
	sustainable materials that		
	inspire and excite your clients.		
	· Choose better the materials		
	of your packaging.		
	Who is it for?		
	This basic course on		
	sustainable fabrics is especially		
	aimed at designers and		
	fashion brands interested in		
	sustainable fashion and		
	wanting to contribute		
	positively to the textile		
	industry.		
	Also to any professional in the		
	sector, stylists and editors,		
	who know how to differentiate		
	between the different subjects		
	and which are the most		
	interesting in terms of textile		
	sustainability.		
Slow fashion next	Objective of this course		
Online course of	This is our new base and super		
introduction to sustainable	exclusive course with which		
and circular fashion	you will learn what sustainable		
12 weeks	fashion really is, its		
	sustainability criteria, its keys,		
	values and vocabulary in an		
	easy and enjoyable way		
	through unique, exclusive and		
	fully updated content with		
	which you will implement		
	immediately everything		
	learned.		
	This course is aligned with the		
	Sustainable Development		
	Goals, especially with the		
	SDGs: 12 Responsible		
	Production and Consumption,		
	4 Quality Education, 1 End of		
	Poverty, 13 Climate Action, 14		
	Life Underwater and 15 Life of		
	Terrestrial Ecosystems.		





And also, in this new edition,		—
you will have access as a guest		
to our Networking Forum for		
the duration of the course so		
that you can interact with your		
classmates and with the rest		
of the community, in addition		
to being able to attend the		
masterclasses for free and		
Exclusive weekly sessions that		
we do live online.		
we do live offinite.		
Who is it for?		
Professionals from the entire		
value chain of the fashion		
industry.		
For fashion businesses already		
created and for entrepreneurs		
who are developing their		
business idea.		

5.5.2. Academic education opportunities in Spain

Higher education (bachelors and masters)	Topics within the identified program	Competencies gained by students	Teaching methods and didactic tools used within the course
<u>Master in management of</u> <u>the fashion industry in esdi</u>	 Program A) Professional introduction to the fashion sector A.1Sectors: High creativity-luxury, sustainable luxury, fast fashion and startups. General lines of sustainable development for each sector. "The Fashion Pact" (fashion industry sustainable commitment). New sectors: Neo-Vintage, Re-Done. Circular economy and fashion (upcycling, recycling, etc.). Organizations and manifestos: The Fashion Pact, Fashion Revolution Org, Ethical Time. A.2.Culture and fashion culture: 	Learn to lead a fashion company from a strategic approach of positioning, branding, product, price, distribution, marketing and communication, delving into essential concepts today such as good ESG criteria and practices, the circular economy, the new inclusive	within the course Methodology based on theoretical and practical sessions, analysis of the current situation to determine current trends, approach and resolution of practical cases and individual and group tutored projects. Faculty with extensive professional experience in companies in the fashion sector, achieving a balance between senior executive positions and profiles with more
	 Sociology, psychology of fashion and its consumption. Upcoming aesthetic trends. 	realities, ecodesign, sustainability	creative or design-related positions, both in large





 Sustainable thinking. Latest 	and digital	compani
innovations in sustainability	transformation.	startups.
applied to fashion.	Offer the	
 New inclusive realities: genderless, 	essential tools	Possibility of
gender fluidity, body positive,	for	extracurricular
non-normative bodies.	understanding	internships in
A.3. Trends:	and managing the fashion	companies in the
 Innovation. 	business, from a	fashion and design sector.
 Creative luxury, fast fashion, 	creative,	Sector.
startups, color and fabric.	commercial and	Masterclasses,
 Fabrics and sustainability (spinning, 	communicative	workshops and
materials, dyes, finishes, etc.).	point of view in	seminars on different
B) Large fashion company	all sectors,	areas related to
B1) Branding	whether they	sustainability and
Brand identity:	are large	innovation in business.
• DNA	companies or	
 Sustainability & Branding 	start-ups.	Visits to luxury
Art direction		retailers, large fashion
Fashion collections:		companies, sustainable
Design team		fashion brand studios
 Product manager 		and sustainable fashion
Buyer		showrooms.
Design:		
Trend App		
 Product structure, families and 		
typologies		
Product manager:		
 Review of design proposal and collections interaction between 		
collections, interaction between		
design, point of sale and consumer		
Review of trends, search for the		
new-commercial		
 Distribution of budgets for the design teams 		
design team		
Buyers / buyers:		
 Design-sales cross-sectional profile 		
• Sourcing (suppliers)		
• Quality (design, fabric, clothing)		
Sustainability		
Calendars and deliveries		
B2) Management		
General management structure:		
management, accounting,		
feasibility departments and their		
competencies		
Sourcing		
 Purchasing management (buyers) 		





	 Offline and online sales New retail trends 		
	Retail management		
	B3) Communication		
	 Keys to great fashion company 		
	communication		
	 Communicate sustainability & 		
	sustainable communication		
	 Communication of the sustainable 		
	transformation of a company		
	 Greenwashing 		
	Channels		
	RRSS		
	 Big media and fashion 		
	 Visual merchandising luxury & 		
	street fashion		
	C) Fashion startups		
	C1) DNA		
	• Creative process, key items and		
	diversification		
	 Ecodesign, Slow Fashion & 		
	Sustainability		
	Entrepreneurship		
	Circle Fashion		
	 Sustainable SME business models 		
	Collection planning		
	C2) Management		
	 How to start 		
	 Small business management 		
	• Sale (offline and especially online)		
	 Online sales and sustainability 		
	C3) Communication		
	Showrooms (webroom vs.		
	showroom)		
	 Shows 		
	Look books		
	 Social media & influencers 		
	 Styling and alternative press 		
Communication, brand	POSTGRADUATE 1 Communication and	To offer a global	The methodology is
management and	Public Relations in the fashion industry	knowledge of	based with:
sustainability in the	Global knowledge of the fashion industry:It	the fashion	-Master classes, which
fashion industry master	provide a practical and comprehensive	market, trends	will allow you to
UIC (International	overview of the fashion industry with a	and the	acquire knowledge and
Catalonia University)	focus on the circular economy and	positioning of	deepen
		companies in	
			1





sustainability, with an impact on business	the sector	in the dif
management variables.	today. To provide	subjects.
	To provide practical	- Workshops, which will help students
MODULE 1	knowledge on	students to put into
Aesthetics, Art and Sustainability	strategy,	practice what they
MODULE 2	channels and	have
The Fashion Industry	new	the knowledge they
MODULE 3	communication	have learnt, sharing
Communication strategy and the Social	tools in the	experiences with
Media Plan	fashion sector.	professionals from the
MODULE 4	To offer a	sector.
The fashion event	complete and	- Successful cases of
MODULE 5	transversal	fashion companies,
Media relations and crisis management	vision of	which will present their
MODULE 6	sustainability	management and
Postgraduate Final Project	throughout the	management and communication model.
MODULE 7	fashion supply chain and to	- Visits to companies
Internships in companies	provide the	that successfully
	means to	successfully manage
POSTGRADUATE 2	develop a	their communication
Fashion Management and Marketing	transparent	and/or are committed
MODULE 1	storytelling in	to sustainability in
Fashion Business	the	their business models.
MODULE 2	management of	- Final projects directed
Stakeholder approach and social impact	its	by
MODULE 3	communication	professionals and
Brand strategy and product positioning	with	academic experts.
MODULE 4	stakeholders	experts.
Digital marketing, tools and innovation	and the	- Internships in
MODULE 5	consumer.	companies, which can be validated
Product management & fashion producer	To train students in the	if you are currently
MODULE 6	strategic	working in
Postgraduate Final Project	organisation of	a fashion company.
MODULE 7	events in the	
Internships in companies	fashion sector.	Sustainability and
internships in companies	Acquire new	circular economy: This
	skills through	degree programme
	the Master's	offers a
	internships and	cross-disciplinary
	learn first-hand	education in
	about the work	sustainability
	developed by	throughout the supply
	professionals in the sector.	chain of the fashion industry, from brand to
		consumer, with a focus
		on transparency.





University expert:creation	Specific objectives and modules	-Obtain detailed	At TECH I
of sustainable fashion	Module 1. Textile technology	knowledge	Tecnológica we use
collections in tech españa	 Identify different types of textile fibers 	about fashion	Relearning
	 Select a textile material for a specific 	design and its	Methodology
	design according to its properties	evolution, which	Master classes 10%.
	 Know the staining techniques 	will be relevant	There is scientific
	 Master the tissue ligaments 	for the work of	evidence on the
	 Know the properties of the different 	professionals	usefulness of the observation of third
	materials and the techniques for their	who wish to	party experts.
	handling and elaboration	develop in this	Learning from an
	 Know the main techniques of textile 	sector.	expert strengthens
	printing	- Make designs	knowledge and
	Module 2. Fashion Design	on paper and	memory, and
	-	digital	generates security in
	 Understand the different work 	techniques that	our future difficult
	methodologies applied to fashion	reflect the	decisions.
	design		Skills and competency
	-	design devised.	practice 8%
	 Develop creative procedures that help 	-Use the	You will carry out
	in the work of fashion design	techniques of	activities to develop
	 Introduce the student to the technical 	pattern making	specific skills and
		and clothing to	competences in each
	procedures necessary to carry out a	create garments	subject area. Practices
	fashion project	and accessories.	and dynamics to acquire and develop
	 Know the different means of 	- Obtain	the skills and abilities
	dissemination and communication of	detailed	that a specialist needs
		knowledge	to develop within the
	the fashion product	about the	framework of the
	 Understand the process of carrying out 	history of	globalisation we live in.
	fashion projects in all its phases	fashion, which	Complementary
		will be relevant	readings 3%.
	 Acquire resources for the visual 	for the work of	Recent articles,
	presentation and communication of	professionals	consensus documents,
	the fashion project.	who wish to	international guides,
		develop in this	in our virtual library
	Module 3. Sustainability in fashion	sector today.	you will have access to
	- Understand that the current lifestyle of	- Design	everything you need to complete your training.
	human beings makes us unsustainable	successful	Case Studies 20%
	consumers	fashion projects	You will complete a
	- Acquire and incorporate environmental	- Learn about	selection of the best
	and sustainability criteria in the design	fashion	case studies on the
	conception and development phase	photography to	subject used at
	 Know preventive and appropriate 	get the best out	Harvard. Cases
	measures to reduce the environmental	of the	presented, analysed
	impact	collections	and tutored by the
	 Use sustainability as a requirement in 	created	best specialists on the
	the design methodology		international scene.
			l





 Provide students with natural and 	
respectable sources of inspiration with	
the environment	
Module 3. Sustainability in fashion content	
3.1. Rethink fashion design	
3.2. The life cycle of a garment	
3.3. Quality and safety regulations in the	
textile sector	
3.4. planned obsolescence	
3.5. Sustainable design	
3.6. sustainable production	
3.7. Sustainable distribution	
3.8. Sustainable use of the garment	
3.9. Recycling	
3.10. sustainable fashion designers	