





SILEO Build up training program for cluster managers





Deliverable Control Page			
Deliverable Title	Training program for cluster managers		
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Author(s)	Gabriela Pare	edes and Andrea	Padré, CICAT
Short Description	This document describes a training programme for cluster managers to support SMEs transitioning to digital and sustainable business models. SILEO Build up a training program for cluster managers composed of 3 modules on advanced technologies & application in lighting and furniture sectors + materials & sustainability (joint online training in EN), local train-the-trainers scheme (at PP's levels, in local language). Summary results reporting document, EN.		
Contributors	All SILEO Par	rtners	
Type R = Report, DEC=Websites, videos etc. O = Other,	R		
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V2	20.02.2025	CICAT + PPs	Interim version with PPs contributions
V3	28.02.2025	CICAT, ELCA	Final deliverable document
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Premises

The **SILEO Eurocluster** project is co-financed by the Single Market Programme (SMP/COSME Pillar) of the European Union. Its primary mission is to support European lighting and furniture SMEs in navigating market and industrial challenges, enhancing their resilience against future shocks, and ensuring they are better prepared for disruptions in supply and value chains. Additionally, the project promotes sustainable business operations and fosters stronger connections between SMEs and industrial and advanced technology ecosystems.

Through a strategic combination of financial and non-financial support measures, SILEO equips industry clusters with the tools needed to facilitate SMEs' digital and circular transitions. Even before the current crisis, the rapid evolution of technology and shifting work dynamics had already begun disrupting jobs and altering skill requirements. However, only a limited number of companies, particularly SMEs, had a clear strategy for addressing these changes. The COVID-19 pandemic intensified this urgency, compelling lighting and furniture businesses, along with their workforce, to adapt to rapidly evolving conditions and prioritize reskilling and upskilling to sustain new, more resilient business models in the post-pandemic era.

To support this transition, SILEO developed the sector-customized Build-Up Joint Training Program, designed specifically for cluster managers and SMEs. This initiative focuses on the adoption of advanced technologies, digitalization of processes, and the integration of sustainable business models. By strengthening clusters' business support services, SILEO ensures that SMEs receive the guidance, resources, and expertise needed to successfully navigate the green and digital transformation, securing their long-term competitiveness and sustainability in an increasingly complex global market.

The consortium is composed of the following clusters, representing the lighting and the furniture industry:

- 1. ELCA European Lighting Cluster Alliance, Italy Coordinator
- 2. Cluster Lumière, France
- 3. CICAT Lighting Cluster, Spain
- 4. Rete di Imprese Luce in Veneto, Italy
- 5. BIC Building Innovation Cluster, Austria
- 6. TFC Transylvanian Furniture Cluster, Romania
- 7. Cluster Legno, Arredo e Sistema Casa FVG, Italy





1. Deliverable Description

This deliverable outlines the design and implementation of a comprehensive training programme aimed at enhancing the skills of cluster managers to better support SMEs in their transition towards digital and sustainable business models. The programme addresses advanced technologies, materials, and sustainability, complemented by a local "Train-the-Trainers" scheme to enable widespread dissemination and practical application.

Key Features:

1. Advanced Technologies & Applications (Module 1):

- Focused on cutting-edge technologies relevant to the lighting and furniture sectors.
- Delivered through four online masterclasses addressing themes such as Additive
 Manufacturing, Augmented and Virtual Reality, Big Data & Analytics, Cybersecurity, Cloud
 Computing, Industrial Internet of Things (IIoT), and Simulation-BIM.
- Targeted at equipping cluster managers with the expertise to guide SMEs in leveraging these technologies across various operational processes.

2. Materials & Sustainability (Module 2):

- Dedicated to sustainable material use, waste management, and circular economy strategies.
- Delivered through four online workshops covering:
 - Life Cycle Assessment of Materials
 - Recycling Processes and Recyclable Materials
 - Bio-Based Materials for Sustainable Applications
 - Industrial Waste Management and Cross-Industry Resource Utilization
- Modules delivered in English with recordings accessible to SMEs for workforce upskilling.

3. Train-the-Trainers (Module 3):

- A local, hands-on training programme conducted by partner clusters in their native languages.
- Emphasizes raising awareness of digital transformation, fostering digital culture, and building digital competency among cluster managers.
- Includes 16 hours of training divided into:



- 8 hours for cluster managers on green/digital transformation plans and sustainable business models.
- 8 hours practical, involving SMEs, to work on real-life case studies (preferably SMEs supported by SILEO Vouchers in WP4).

Implementation Period: M7-M30

Objective:

The training programme aims to strengthen the competencies of cluster managers and internal staff, enabling them to offer robust services for SME reskilling/upskilling, building resilience, and adopting advanced and sustainable practices in their operations.

This deliverable directly supports the overarching goal of the SILEO project by fostering digital and green transformations in the lighting and furniture sectors.

2. Build up training program for cluster managers

The **SILEO Training Programme** for cluster managers is designed to equip professionals with the skills and knowledge necessary to drive digital transformation, foster innovation, and promote sustainability within the lighting and furniture sectors. This programme, structured into three modules, addresses advanced technologies, sustainable materials, and effective local dissemination strategies. By focusing on upskilling and reskilling, the training aims to strengthen the services provided by clusters to their SMEs, enabling them to adopt resilient, forward-thinking business models.

The three modules provide a blend of theoretical knowledge and practical application:

- 1. **Module 1** explores the adoption of advanced technologies to enhance production and operational processes.
- 2. **Module 2** focuses on sustainable materials and waste management to promote green business practices.
- 3. **Module 3** enables cluster managers to implement localized training and support SMEs in leveraging digital transformation.

2.1 Module 1: ADVANCED TECHNOLOGIES & APPLICATION IN LIGHTING AND FURNITURE SECTORS

This module introduces cluster managers to cutting-edge technologies shaping the future of the lighting and furniture industries. Delivered through **four online workshops**, it covers topics such as Additive Manufacturing, Augmented and Virtual Reality, Big Data & Analytics, Cybersecurity, Cloud Computing, IIoT, and Simulation-BIM. The focus is on helping cluster managers understand how these technologies can enhance efficiency and innovation across production and operational phases, enabling them to better support SMEs in adopting these solutions.



1° WORKSHOP: 3D PRINTING IN FURNITURE AND LIGHTING INDUSTRIES

ORGANIZER	BIC	
DATE	6 February 2024 (09:00-11:00 CET)	
PROGRAMME	 Welcome and brief overview of the training. Icebreaker: Participants' familiarity with 3D printing (e.g., with Mentimeter) 3D Printing Basics What is 3D printing? Quick overview of 3D printing technologies. Applications and Challenges Real-world examples of 3D-printed furniture and lighting. Potential challenges and how to overcome them. Interactive Exercise (Using Miro Board, for example) Brainstorm: Participants share ideas on how 3D printing can benefit their business. Discussion of the ideas. Opportunities and Resources Opportunities for SMEs in adopting 3D printing. Online resources and support available for further learning. 	
RECORDINGS:	N/A	
SLIDES:	N/A	

2° WORKSHOP: AUGMENTED & VIRTUAL REALITY + SIMULATION-BIM

ORGANIZER	RI LIV 20.03.2024 – 09:00-11:00 26.03.2024 – 09:00-11:00 SKEINHOLDING, one of the major player in Italy related to BIM technologies, offering a wide range of services on Virtual Reality and Augmented Reality in the building industry.	
DATE		
EXPERT TRAINER		
PROGRAMME	 1° part - BIM Simulation What is the BIM philosophy The importance of BIM in construction/interior design (?) The BIM philosophy in lighting and furniture. The BIMobject marketplace: advantages & tools Application and case studies in the lighting and furniture sector. 	
	 2° part- Augmented and virtual reality Ar and VR, a technology that is revolutionizing the market. A wide range of solutions for lighting and furniture products How to integrate the solution into the world of lighting and furniture. 	



	Ar and VR applications in corporate documentation
RECORDINGS:	Upon request
SLIDES:	Upon request

3° WORKSHOP: Zigbee, EnOcean, and IoT protocols

ORGANIZER	CLUSTER LEGNO ARREDE E SISTEMA CASA FVG
DATE	- 23rd January 2024: Hardware and Software solutions for monitoring energy flows and for improving energy efficiency + Hardware and Software solutions for an efficient asset management.
	- 25th January 2024: Hardware and Software solutions for the efficiency and optimization of production processes.
	9.00-11.00 AM
	DIGITALISATION FOR ENERGY, PRODUCTION AND ASSET EFFICIENCY Some and the state of t
EXPERT TRAINER	Schnaider Eletric, the technology provider we would like to involve, offers different technologies applicable to the several industrial machines used in lighting and furniture production to guarantee the efficiency of the energy flows and a better management of the energy waste in production phase. These technologies work on Zigbee, EnOcean, and IoT protocols to obtain reliable and controlled energy flows for the machineries used.
PROGRAMME	The general topic of the workshop will be the promotion of hardware and software that enable the digitalisation of 3 main axes: - Energy Efficiency - Production efficiency of the machineries - Efficient Management of Assets During the workshops, practical cases will be presented to show real applications of the technologies in lighting and furniture sectors.
RECORDINGS:	N/A
SLIDES:	N/A



4° WORKSHOP: BIG DATA & AI

ORGANIZER	CICAT
DATE	23 April 2024 — 09:00-11:00 AM ONLINE MASTERCIASS: BIGDATA & AI FOR LIGHTING AND FURNITURE SECTOR THE NUMBER SECTOR THE NUMBER SECTOR THE NUMBER SECTOR THE NUMBER SECTOR SECT
EXPERT TRAINER	Elisenda Martí: Technical Engineer in Industrial Design, Design and Development of Industrial Products by the School of Design ELISAVA. Elisenda has a Master in Plastic Materials and Component Engineering, Design and manufacture of plastic industrial products by the Fundació Politècnica de Catalunya and the Fundació ASCAMM, and an Executive Master in Big Data Science by the International University of Catalonia. She is currently the Co-Coordinator of the Executive Master in Advanced Analytics and Data Science at the Universitat Internacional de Catalunya. Carlos Cosials: Computer Science Engineer from the Universitat Politècnica de Catalunya (UPC).Carlos holds a Bachelor of Business Administration (B.B.A.) from EADA Business School, a postgraduate degree in Supply Demand Chain from Esade, and training in Design Management and Gamification. He is currently Industry 4.0 Manager at Integral Innovation Experts, a business and operations consultancy for the deployment of Industry 4.0 enabling solutions.
PROGRAMME	Training to foster the adoption of BD & AI techniques. Online webinar to awareness about the topics related to the techniques, with an introductory approach. A 3-hour introductory webinar to describe what techniques, technologies are subjacent in the AI domain that could promote potential applications at the industrial (light & furniture) companies: — What is Big Data? Which technologies facilitate the expansion of this discipline — What is Artificial Intelligence? Which statistical techniques facilitate it the promotion — Which types of IA are becoming relevant? Machine Learning, Deep Learning, Natural Language Processing, Supervised and unsupervised, — Which strategy figure out to promote the adoption of AI? Adopt a "data-driven" culture to promote the adoption of IA techniques — Where apply them at the company? Distinguish different types of IA and their applications & implications to different scenarios: Product Design: which AI-features include inside the Product? => new "AI-Product features", i.e. Control, Customization, etc Manufacturing Process: which AI-features include in the (control & automation) Process? Sales & Post Sales Activities: which AI-Product features provides a new business & service model? New maintenance models, outcomes as energy efficiency, light
RECORDINGS:	efficiency & wellbeing efficiency upon request



Participants in Module 1

The training aimed to equip cluster managers with the expertise necessary to support SMEs in adopting these technologies across various operational processes. Below is a breakdown of the number and typology of participants across the different clusters involved:

- **BIC**: 34 registered participants, representing a mix of cluster managers (including representatives from Interior Cluster Sweden, SILEO clusters, and AMBIT Cluster), SMEs (such as Licht Konzept, Look Design, 2f Leuchten, and Flowfactury), and research institutions (such as Wood K Plus).
- **LIV**: 21 participants, including 12 SMEs, 1 research center, 1 cluster organization, and 7 SILEO project partners.
- **CLUSTER LEGNO ARREDE E SISTEMA CASA FVG**: 20 participants, all of whom were SMEs from the cluster. These SMEs belong to sectors such as furniture manufacturing, wood processing, interior design solutions, material suppliers, and smart home solutions.
- CICAT: A total of 35 participants, including 21 SMEs. The attendees represented a mix of cluster
 organizations, lighting manufacturers, component suppliers, control solutions providers, and
 consulting/innovation firms.

This diverse participation ensured a **multidisciplinary approach**, fostering collaboration between **clusters**, **SMEs**, **research institutions**, **and technology providers**, reinforcing the SILEO project's mission of promoting technological innovation and digital transformation in the **lighting and furniture** sectors.

2.2 Module 2: MATERIALS & SUSTAINABILITY

With a focus on the green transition, this module addresses the critical role of materials in sustainable business strategies. Through **four online workshops**, participants will explore:

- Life Cycle Assessment of materials to integrate circular economy principles.
- Recycling processes and the use of recyclable materials to reduce environmental impact.
- Bio-based materials for durable and eco-friendly applications.
- Industrial waste management, including cross-industry reuse of waste as raw materials.
 The knowledge gained will empower cluster managers to guide SMEs in embracing sustainability while maintaining competitiveness.

ORGANIZER: RI LIV



EXPERT TRAINER: MATERIALLY (https://www.materially.eu/en/home/)

1° online workshop – Life Cycle of Materials

Tuesday 14/11/2023 | 9:00-11:00 CET

2° online workshop - Recycling loop

Tuesday 21/11/2023 | 9:00-11:00 CET

3° online workshop - Bio-based materials

Tuesday 05/12/2023 | 9:00-11:00 CET

4° online workshop - Industrial waste management

Tuesday 30/01/2024 | 9:00-11:00 CET



1° online workshop: "Life Cycle of materials"

F	The cycle of materials
Date	14 November 2023 09:00-11:00 CET
Presentation	The 1° online workshop explores how materials can help implement
	sustainability and circular economy business strategies throughout their life
	cycle, and the importance of LCA.
Content overview	1. Introduction
	 The context: climate crisis and excessive use of resource
	 Key concepts: Circular economy, Carbon- related concepts, LCA
	- The role of materials: circular materials and materials for the circular
	economy
	2. Choosing materials: evaluation criteria
	- Wood and wood-based
	- Paper
	- Minerals
	- Glass
	- Metals
	- Plastics
	- Paints and coatings
	- Composite materials
	- Textiles
	- Leather and leather alternatives
	3. <u>Trend topics</u>
	 Free from: reducing the use of chemical substances
	- Product life extension
	- Traceability and sustainable supply chain
	- Social projects
	 Voluntary certification systems



2° online workshop: "Recycling Loop"

The 2° online workshop explores the theme of recycling in its various aspects,
rom recycled materials to recyclability in the lighting and furniture sector.
. <u>Introduction</u>
 Recycling in Italy and Europe
- Why recycling?
- Recycled content
- Recyclability
2. Recycling of materials: state of the art
- Wood and wood-based
- Paper
- Minerals
- Glass
- Metals
 Plastics: thermoplastics and thermosets
- Paints and coatings
- Composite materials
- Textiles
 Leather and leather alternatives
3. <u>Trend topics</u>
- Design for recyclability
 Evaluating recycled content and recyclability: schemes and certifications
- Take-back programmes
- Recycling the unrecyclable
• • • • • • • • • • • • • • • • • • •

3° online workshop: "Bio-based materials"

3° online workshop: "	Bio-based materials	
Date	5 December 2023 - 09:00-11:00 CET	
Presentation	The 3° online workshop addresses the use of bio-based materials for durable and disposable applications, including packaging in the lighting and furniture sector.	
Content overview	1. Introduction	



	-	Cellulose as a new feedstock	1
	-	Biobased & high tech: bio-based technical products and materials	

4° online workshop: "Industrial waste management"

Date	30 January 2024 - 09:00-11:00 CET
Presentation	The 4° online workshop explores the topic of industrial waste management, waste disposal, and the possible reuse of waste from different sectors (e.g. agriculture) as raw materials to create new materials for the lighting and furniture supply chain.
Content overview	 The context: what waste? Materials from waste: state of the art agricultural waste by-products of the food chain waste of industrial processes waste from the building industry residues of waste treatment processes plastic dispersed in the environment Trend topics: EPR and new supply chains Industrial symbiosis to manage waste The city as a source of new, urban raw materials Materials from CO2

RECORDINGS – upon request

14.11.23 - SILEO 1° online workshop: "Life Cycle of materials"

21.11.23 - SILEO 2° online workshop: "Recycling Loop"

05.12.23 - SILEO 3° online workshop: "Bio-based materials"

30.01.24 - SILEO 4° online workshop: "Industrial waste management"

Participants in Module 2

The knowledge gained in these sessions equips cluster managers with the expertise needed to guide SMEs in adopting sustainability strategies while maintaining competitiveness.

Below is a breakdown of the number and typology of participants in this module:

- Total participants: 44, including:
 - o 34 SMEs from various sectors.
 - 7 SILEO project partners.
 - 1 cluster organization, representing industry stakeholders.
 - o 1 research center, contributing scientific knowledge on sustainable materials.
 - 1 large company, bringing an industrial perspective to sustainability strategies.



This diverse participant base ensured a multidisciplinary approach, fostering collaboration between SMEs, clusters, research institutions, and industry players, reinforcing the SILEO project's commitment to driving green transition and sustainable innovation in the lighting and furniture sectors.

2.3 Module 3: TRAIN-THE-TRAINERS

This module equips cluster managers to implement localized training programs within their clusters. It emphasizes building awareness of digital transformation opportunities, fostering a digital culture, and enhancing digital competencies.

Participants will receive 16 hours of training, divided into:

- 8 hours focused on developing green/digital transformation plans and sustainable business models for cluster managers and staff.
- 8 hours of hands-on sessions with SMEs, applying concepts to real-life case studies.
 By fostering practical skills and showcasing IT solutions, cluster managers will be better positioned to support SMEs in adopting advanced manufacturing and sustainable practices.

RILIV LOCAL TRAINING

Training to	Staff on building business green/digital transformation plan and sustainable business models
DATE	Monday 18 november 2024 (09-13; 14-18) In presence at Luce in Veneto/ELCA headquarters Piombino Dese PD Italy
Duration	8 hours
EXPERT TRAINER	Experts: UNISMART; SOCIETA' ITALIANA BREVETTI; SYSTEM CONSULTING
PROGRAMME	1° part (09:00 - 13:00) – "Analysis of the business processes of SMEs in the lighting industry and potential growth opportunities through the introduction of new technologies: from technology scouting to the assessment of possible support services" Unismart, as Foundation of the University of Padua dedicated to promoting Technology Transfer and Post-graduate Training, provided Luce in Veneto and ELCA staff with practical tools to conduct an in-depth analysis of the various stages of companies' business processes—such as design, production, procurement, commercialization, and logistics—and identified opportunities for improvement through IT and digitalization technologies. This workshop focused particularly on SMEs in the lighting sector and its supply chain. During the meeting, experts from Unismart facilitated discussions on potential services the cluster could offer to support local companies in adopting new sustainable business models and circular approaches. 2° part (14:00 - 18:00) - Intellectual proprieties (IP) protection: opportunities for innovation and business growth



In the afternoon, special attention was given to how Patent Box tools can enhance company innovation and competitiveness, encouraging strategic investments in research and development. An in-depth analysis was conducted on Intellectual Property (IP) protection, highlighting opportunities for innovation and business growth. Experts from the Società Italiana dei Brevetti and System Consulting provided valuable insights, presenting real-world experiences of companies and the challenges they faced.

Methodology used: frontal lessons combined with open discussions, following the Design Thinking methodology.

Nº of participants

4 (cluster managers and staff): Alberto Sozza; Antonella Venza; Fabiola Simeoni and Giada Bordignon – RETE DI IMPRESE LUCE IN VENETO

1 (cluster manager): Marta Krakowiak – ELCA European Lighting Cluster Alliance

Communication:

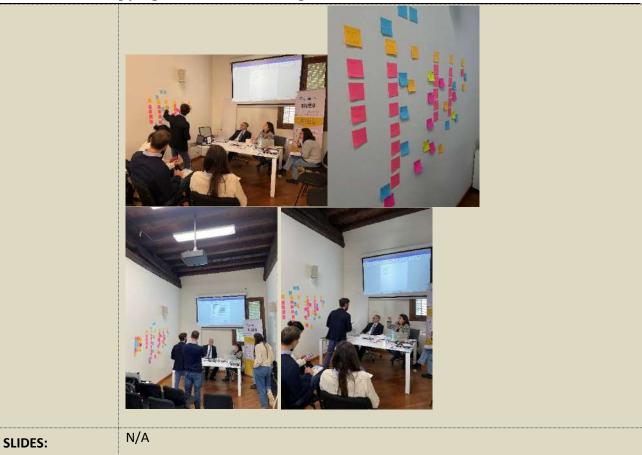
https://www.luceinveneto.com/opportunita-fiscali-per-innovazione-e-crescitadimpresa-sileo/

https://www.linkedin.com/feed/update/urn:li:activity:7262782772908343297









Training to	SMEs - hands-on practical session
DATE	11 December 2024 (14:00-18:00)—1° part 24 January 2025 (14:00-18:00)—2° part Hybrid mode: online using the Zoom platform and in presence at Luce in Veneto/ELCA headquarters in Via dei Marcello 13/11 35017 Piombino Dese PD Italy
Duration	8 hours
REGISTRATION LINK	N/A
EXPERT TRAINER	UNISMART; DEOS STUDIO; UNIPD
PROGRAMME	1° part - Intellectual proprieties (IP) protection: opportunities for innovation and business growth. Practical session with the involvement of SMEs The workshop was designed to train SMEs in the lighting sector on the strategic importance of intellectual property protection, with contribution from Luce in Veneto with the support of industry experts from Unismart and Deos Studio. The session also featured case study presentations, offering examples and inspiration for companies looking to strengthen their IP strategies.



2° part - Luce in Veneto technological scouting return with design thinking methodology and technical insights into selected technologies with Unismart The workshop aimed to present companies with the key findings from the Unismart technological scouting on major emerging technologies impacting the lighting sector. With the support of Unismart and two professors of the University of Padua provided insights on Sustainability and LCA assessment and AI and process automation (which topics were identified during the initial meeting on the morning of November 18th) addressing key trends and sectoral challenges. The session concluded with a brainstorming discussion on Luce in Veneto's potential services for lighting SMEs.

Nº of participants

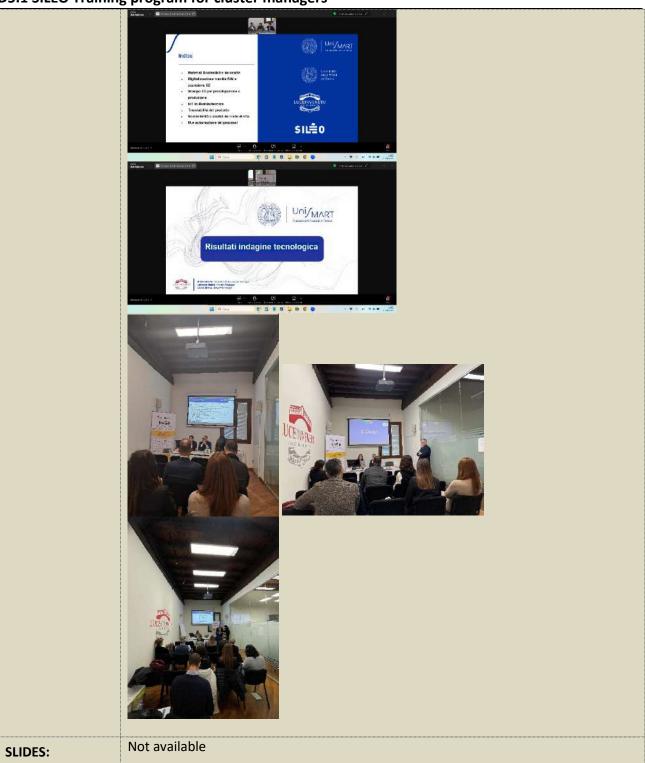
- 4 (cluster managers and staff): Alberto Sozza; Antonella Venza; Fabiola Simeoni and Giada Bordignon – RETE DI IMPRESE LUCE IN VENETO
- 1 (cluster manager): Marta Krakowiak ELCA European Lighting Cluster Alliance
- 25 lighting SMEs

Communication:

https://www.linkedin.com/feed/update/urn:li:activity:7271799511151255552 https://www.luceinveneto.com/sileo-tecnologia-sostenibilita-e-automazione-dei-processi-per-il-settore-illuminotecnico/









Cluster Lumière LOCAL TRAINING

Training to	Staff on building business green/digital transformation plan and sustainable business models
DATE	15/01/2025
Duration	8 hours
EXPERT TRAINER	Weavers and Routes Numeriques
PROGRAMME	Our staff training was to improve our knowledge on digital proficiency, raising awareness of digital transformation to support our members assessing the feasibility of adopting new digital transformation strategies to strengthen and sustain their economic model. The trainer program highlighted IT and digitalization practices for production, commercialization, and management. The training program included: Digital Security and mandatory best practices Network basics for connected objects Digital skills and expertise DMX and communication protocols VR/AR: Computer-aided design tools, lighting virtualization, and digital twins Data analysis for manufacturers and users IoT and Data: how to collect, store and use (the way to AI) How to Identify business opportunities
Nº of participants	4 (Cluster Managers and staff) Henri Coulloumme, Mary Hadidi, Gaelle Verot, Julie Henry.
Communication:	Participez à notre formation Transformation Numérique I Contract Lander d'actant déplication du mêmer across In Man PROJET Transformation Numérique Formation * Transformation Numérique Transformation Numérique Transformation Numérique Formation * Transformation Numérique Transformation Numérique Formation * Transformation Numérique Transformation Numérique Formation * Transformation Numérique

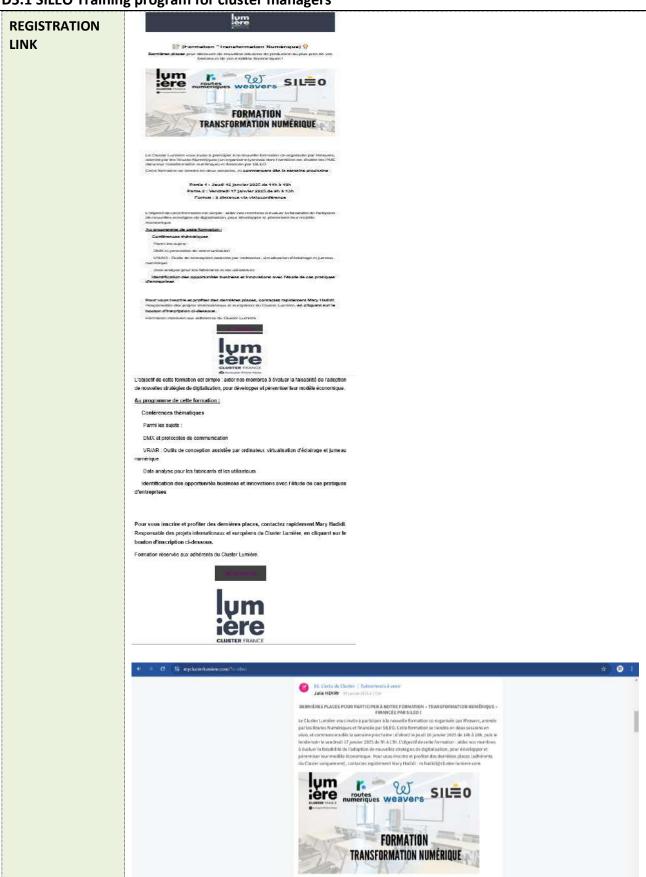




SLIDES: N/A

Training to	SMEs - hands-on practical session
DATE	16/01/2025 14h-18h(4hrs) 17/01/2025 9am-1pm (4hrs)
Duration	8 hours

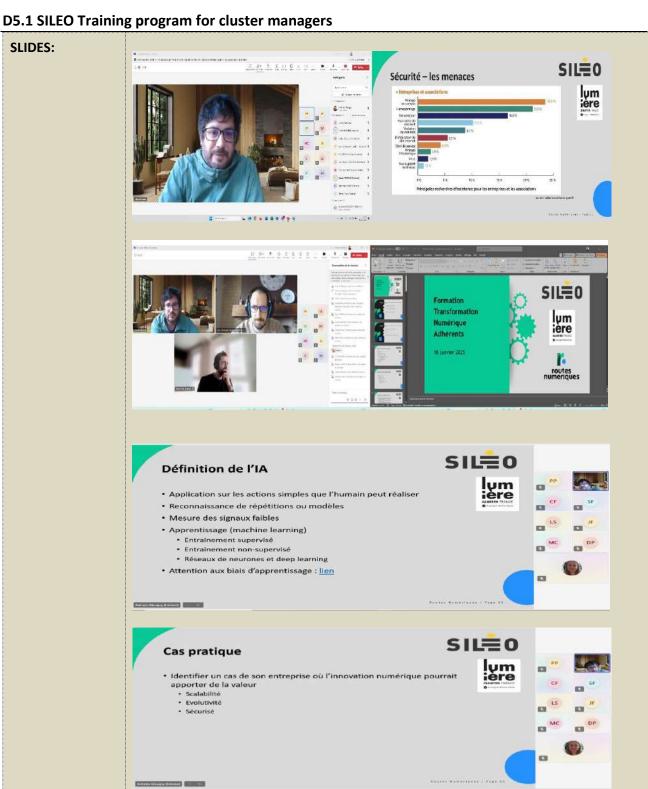






Weavers and Routes Numeriques **EXPERT TRAINER** Members engaged in hands-on exercises and real-life company case studies to **PROGRAMME** evaluate the potential for implementing advanced manufacturing solutions paving the way for their organizations to transition to innovative & eco-friendly business strategies. The training program included: Digital Security and mandatory best practices Network basics for connected objects Digital skills and expertise DMX and communication protocols VR/AR: Computer-aided design tools, lighting virtualization, and digital twins Data analysis for manufacturers and users IoT and Data: how to collect, store and use (the way to AI) Identifying business opportunities and innovations through practical case studies from companies. 10 Nº of participants **Communication:** numeriques Wea TRANSFORMATION NUMER w **FORMATION** TRANSFORMATION NUMÉRIQUE



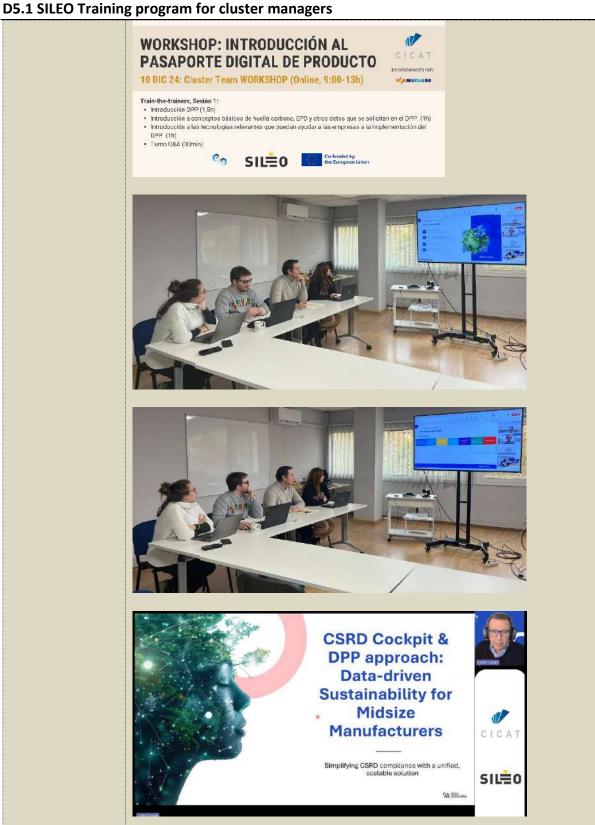




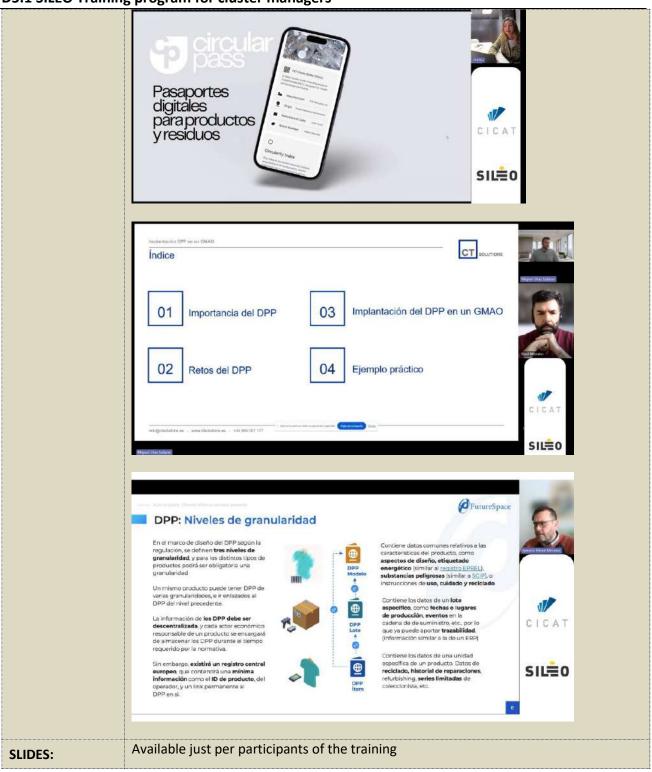
CICAT LOCAL TRAINING

Training to	Staff on building business green/digital transformation plan and sustainable business models
DATE	10/12/2024 (4h) & 21/1/2025 (1h) + 28/1/2025 (2h) + 30/1/2025 (1h)
Duration	8 hours divided in 2 sessions: 4h for Digital Product Passport (DPP) introduction + 4h for technology examples for DPP implementation (individual sessions).
REGISTRATION LINK	N/A
EXPERT TRAINER	MARGUBE & TECH COMPANIES (BLUE ROOM, 9ALTITUDES, CT SOLUTIONS & FUTURE SPACE)
PROGRAMME	This session provided CICAT staff with key insights into the Digital Product Passport (DPP), essential data requirements, and technologies supporting EU-aligned sustainable business models.
	DIGITAL PRODUCT PASSPORT (DPP): Introduction to DPP and associated technologies for implementing it.
	Content Overview (DPP Intro & TECH sessions):
	Introduction to the DPP: Fundamental concepts, benefits, and alignment with EU sustainability goals.
	Key Data Requirements: Explanation of carbon footprint, Environmental Product Declarations (EPDs), and other critical data points.
	Overview of Relevant Technologies: Technologies to support DPP implementation, including examples.
	- BLUE ROOM - 9ALTITUDES - CT SOLUTIONS - FUTURE SPACE
Nº of participants	1 General Director 1 Cluster manager 1 Project manager 1 Communication manager
Communication:	











Training to	SMEs - hands-on practical session
DATE	23/01/2025 & 11/02/2025
Duration	8 hours divided in 2 sessions: 4h for DPP introduction + 4h for technology examples for DPP implementation.
EXPERT TRAINER	1 st Session: MARGUBE 2 nd Session: Smartech, BLUE ROOM, 9ALTITUDES, CT SOLUTIONS & FUTURE SPACE
PROGRAMME	This workshop included two sessions designed specifically for SMEs. The first session introduced the Digital Product Passport (DPP), core concepts, and essential sustainability data aligned with EU objectives. The second session focused on practical technologies (Blockchain, IoT, RFID, AI, Big Data) to support SMEs in implementing digital and sustainable business models. Summary of Contents: SESSION 1: Introduction to the DPP 1. Introduction to the Digital Product Passport (DPP)
Nº of participants	 Future Space Session 1: 31 SMEs in person & 22 online Session 2: 9 SMEs in person & 31 online
Communication:	Jession 2. J Jivies in person & J1 online



WORKSHOP: INTRODUCCIÓN AL PASAPORTE DIGITAL DE PRODUCTO



23 ENE 25: WORKSHOP para EMPRESAS y ENTIDADES (9:00-13h)

Train-the-trainers, Sesión 1, Presencial (Oficina CICAT, Sala Novolux):

- Introducción DPP (1,5h)
- Introducción a conceptos básicos de huella carbono, EPD y otros datos que se solicitan en el DPP. (1h)
- Introducción a las tecnologías relevantes que puedan ayudar a las empresas a la implementación del
- Turno Q&A (30min)



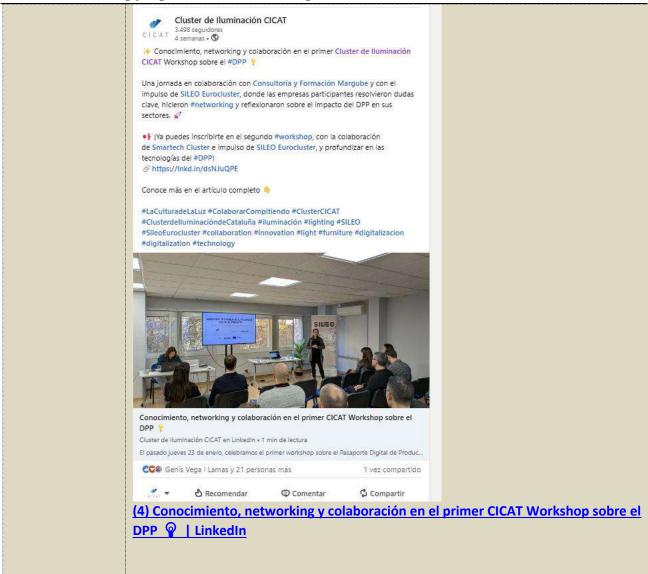




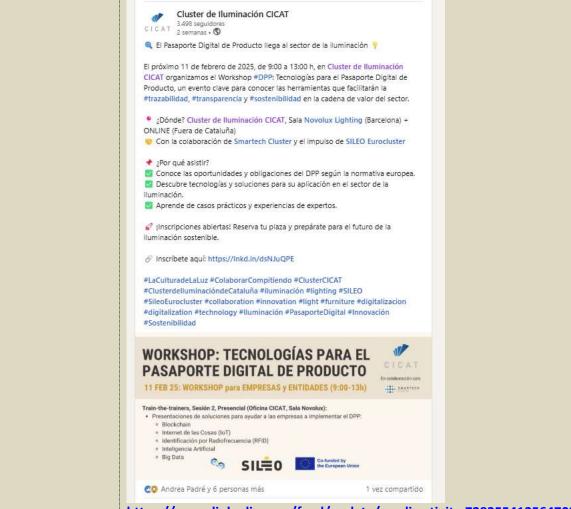








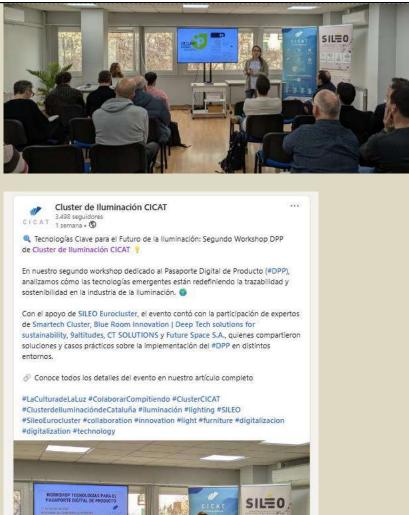




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El 11 de febrero organizamos el segundo workshop dedicado al DPP, esta vez a las tecnologías. Est...

CQ# 28 2 comentarios · 4 veces compartido Reacciones **A A O O O O O O O**

(4) Tecnologías Clave para el Futuro de la Iluminación: Segundo Workshop DPP de CICAT | LinkedIn

SLIDES:

<u>N/A</u>



BIC LOCAL TRAINING

Training to	Staff on building business green/digital transformation plan and sustainable business models
DATE	29 30.04-2024, from 08 am to 4 pm
Duration	8 hours
EXPERT TRAINER	DI (FH) Andreas Topf from WIFI OÖ GmbH
PROGRAMME	 Basics of 3D design Data exchange with a focus on importing existing 3D geometries Creation of 3D printable data formats Output of the designs on a professional 3D printer
Nº of participants	Isabella Mantello Stephan Hölzl
Communication:	As per internal local training, communication was limited to internal counication channels
SLIDES:	Available just per participants of the training

Training to	SMEs - hands-on practical session
DATE	22.08.2024, from 09 am 4 pm
Duration	7 hours
EXPERT TRAINER	Matthias Tindorf "INNraum" Technologiezentrum GmbH
PROGRAMME	 Introduction Welcome and brief overview of the training Presentation of the SILEO project 3D Printing Basics: Core concepts of additive manufacturing Understanding 3D printing and insights into various technologies shaping the industry Applications and Challenges: Real-world applications of 3D-printing in the furniture and lighting industries. Potential challenges and strategies to overcome them. Opportunities and Resources: Potential 3D printing for SMEs Resources and support available for further learning. Lab visit: Virtual tour of the lab of Business Upper Austria and the 3D printing projects.



Nº of participants	9
	BIC Website: https://www.b-i-c.at/veranstaltungen/detail/hands-on-experience-mit-3d-druck-fuer-den-moebelsektor-22-08-2024 One-pager HANDS ON DIPPRINGE MIT 3D DRUCK FUN DEN Sie werden praktische Übungen durchführen und mit den 3D. Druckern von Ort experimentieren, um seine Anwendungen für Ihre Branche bezeite versichen zu können. Website bezeiten den Spiele versichen zu können. Website bezeiten den Spiele versichen zu können. Website der Spiele versichen den Spiele der Spie
	LinkedIn post: https://www.linkedin.com/posts/buildinginnovationcluster_hands-on-experience-mit-3d-druck-f%C3%BCr-den-activity-7211620564434636801- 4aPk?utm_source=share&utm_medium=member_desktop Email broadcast: https://11db1734905542fbbe60ab1d69afac25.marketingusercontent.com/m/view/YD70qju2ljfPEueoHBZIR1LxSMsj7T2OxtDlpoxuWSAx?msdynttrid=2LpryoKsOwz9SP3 hXEg-JRS_LQLRT88TyegbsPMm2wE
SLIDES:	Available just per participants of the training

TFC LOCAL TRAINING

Training to	Staff on building business green/digital transformation plan and sustainable business models
	COURSE 1 – Protection of IPRs
	COURSE 2: The importance of insurance in safeguarding investments
	COURSE 3: Leveraging the DNSH (Do No Significant Harm) principle in a Digital Age
DATE	5.09.2024, 17:00 – 20:00
	7.10.2024, 17:00 – 20.00
	4.11.2024, 17:00 – 20.00
Duration	3 + 3+ 3 hours



	g program for cluster managers N/A
REGISTRATION LINK	
EXPERT TRAINER	Campan Timonea, Şerban si Asociaţii, CMC Group Risk Advisor
PROGRAMME	COURSE 1 – Protection of IPRs 5.09.2024, 17:00 – 20:00 Led by Adina TIMONEA, partner in the Campan Timonea civil professional law society. She is an advisor in industrial property since 2012, authorized by the State Office for Inventions and Trademarks and the founder of Tas Industrial Property Agency. Her area of expertise is consultancy in industrial property law, commercial law, also offering business consultancy. She has extensive experience in the field of intellectual property, being also a European adviser in industrial property/EUIPO representative. She is a specialist in the resolution of disputes in the commercial field and the field of intellectual property at the international level, representing well-known companies from the country and abroad, both in the negotiation procedure and in case of litigation.
	 The course covered the following main topics: When and why is intellectual property protection important? What is the relevance of IP indicators in research projects? The differences between patent, trademark, industrial designs and other forms of IP Market correlation with regulatory coverage How do OSIM, ORDA, EPO, EUIPO work? The process and costs associated with protective measures Ways to capitalize on IP rights
	 COURSE 2: The importance of insurance in safeguarding investments 7.10.2024, 17:00 - 20.00 The course focused on the crucial role of insurance in safeguarding business innovations and investments. The discussion covered the following topics: Identifying risks that could disrupt activities and conducting internal risk assessments; Using insurance to enhance employee loyalty and understanding its fiscal implications; Insurance requirements in relations with grant funders in research projects and innovation initiaitves; Exploring pre-financing insurance as an alternative to bank guarantee letters; Technical requirements for machinery and infrastructure purchased under national funded projects, within the furniture sector.
	COURSE 3: Leveraging the DNSH (Do No Significant Harm) principle in a Digital Age 4.11.2024, 17:00 – 20.00 Led by Daniela Şerban – owner of Şerban si Asociaţii is a company made up of consultants with over 10 years of experience in the field of environmental protection. The company was established in 2016 after a long period in which the company's founder, Daniel Şerban, worked as a freelancer both for companies in Romania and abroad.



The course covered the following key topics:

- The importance of the DNSH principle: Understanding its implications for tenders and investments.
- Digital tools for DNSH analysis: How companies can use technology to assess their activities and products against DNSH criteria.
- Producer responsibility: Aligning with DNSH requirements through smart manufacturing and digital traceability

Nº of participants

6cluster Staff (Hygia & CMT/CLUSTER MOBILIER TRANSILVAN)
13 SMEs, 1 big company from manufacturing and service suppliers in the furniture industry, 1 university

Communication:















Training to	SMEs - hands-on practical session
Truming to	TRAIN THE SMEs – "Innovation for business" – led by Ciprian Morcan & Ioan Cionca Dedicated to SMEs
DATE	22.11.2024; 10.00 – 18:00
Duration	8 hours
REGISTRATION LINK	N/A
EXPERT TRAINER	Hygia - Ciprian Morcan & Ioan Cionca
PROGRAMME	The discussion focused on 3 main topics, presented by Ciprian Morcan and Ioan Cionca: • DNSH and its integration within business practices • The Digital Product Passport and how it will impact business • Innovation opportunity and digitalization For the whole day, participants were involved into valuable discussions on key industry topics such as insurance, the DNSH (Do No Significant Harm) principle, and the role of digital transformation, sustainability, and innovation in the furniture sector. In the final session, participants engaged in a discussion about the role of clusters and directly TFC, with focus on the following key areas: • Exploring trends in digitalization, sustainability, and smart manufacturing. • Addressing industry challenges, such as improving supply chain digitization and creating more eco-friendly designs. • Developing actionable strategies for enhancing competitiveness and market reach through digital transformation. As the meeting took place in a remote location, with 1 prior day of discussion, the feedback was positive and reflected the eagerness of participants to be further involved in innovative projects within the cluster.



Nº of participants	13
Communication:	
SLIDES:	N/A

CLUSTER LEGNO ARREDO E SISTEMA CASA FVG LOCAL TRAINING

Training to	Staff and SMEs on the challenges and opportunities for the furniture products supply chain in the face of the entry into force of the new EU Eco-design Regulation (ESPR)
DATE	23 rd September + 29 th and 30 th October 2024
Duration	8 hours (4 + 2 + 2)
REGISTRATION LINK	Tavolo tecnico Sostenibilità: 1° giornata Microsoft Teams Riunione informale- Partecipa
EXPERT TRAINER	Mr. Carlo Proserpio LCA & Design for Sustainability expert Since 2003 he has been involved in business consultancy and training on Design for Environmental Sustainability in the Design Department of the Politecnico di Milano. His work focuses on methods and strategies for the integration of environmental requirements in the development of environmentally sustainable products and Services. He carries out activities in the field of: Life Cycle Design Methods for assessing the environmental impact of industrial products (Life Cycle Assessment – Product Environmental Footprint).
PROGRAMME	An 8-hour workshop to describe the role of eco-design and the LCA (Life cycle assessment). • Brief introduction of the participants. • The topics covered during the workshop are: • The role of eco-design: • the European context • European Green Deal • global risk report • transition to circular economy



	b bloglam for claster managers
	the role of design in the circular economy action plan
	o FOCUS: ESPR + DPP
	o FOCUS LCA/PEF
	Q&A + Networking
	Cluster Staff (5)
Nº of participants	` '
	SMEs involved (8):
	Braida Srl
	Mattiazzi Srl
	GS Srl
	Giarle
	Segheria Fabbro
	Friulintagli
	Sntalucia Mobili
	• 3b Spa
Communication:	- 29 th October (first workshop for SMEs)
	https://clusterarredo.com/2024/10/30/mattinata-di-studio-e-formazione-in-
	<u>campo-lean-e-digitale-per-il-team-di-cluster-legno-arredo-2/</u>
	- 30th October (second workshop for SMEs)
	https://clusterarredo.com/2024/10/30/30-ottobre-2024-si-concludono-i-
	due-giorni-di-tavoli-tecnici-su-sostenibilita-ed-ecodesign-per-il-settore-
	legno-arredo/
SLIDES:	N/A

Training to	SMEs - hands-on practical session/2° WORKSHOP: Lean and Digital Management
DATE	8 th + 13 th November 2024
Duration	8 hours (4 + 4 hours)
EXPERT TRAINER	Marco Pasquin Training Manager – Lean & Digital Expert Certified Lean Six Sigma Master Blackbelt, manages and coordinates corporate training programmes for process improvement and operational excellence.
PROGRAMME	An 8-hour workshop to describe the principles of Lean methodology, how to optimise existing processes and methodologies, and the discovery of new growth opportunities from a digital and circular perspective. The topics covered during the workshop are: • Definition of Lean e Digital management • Lean principles, and how to seize digital opportunities • Introduction to Industry 4.0 • Discovering digital opportunities along the entire value chain • Introduction Lean Management • Acquire the fundamentals to start Lean and Digital transformation projects • Implement essential lean tools and techniques • Experience the digitisation and Lean management processes in the Model-Factory at LEF



Nº of participants	Cluster Staff (4) SMEs involved (6): • Lanta SRL • Mobilificio Santa Lucia Spa • EMANUELE MARIOTTO SRL • 3B Spa • Biesse Crea Srl • ECMA SRL
Communication:	https://clusterarredo.com/2024/11/11/8-novembre-2024-prende-avvio-il-primo-tavolo-tecnico-dedicato-alla-digitalizzazione-e-ai-processi-lean/https://clusterarredo.com/2024/11/14/8-novembre-2024-prende-avvio-il-primo-tavolo-tecnico-su-digitalizzazione-e-processi-lean/
SLIDES:	N/A