### **PILOT DORNBIRN** ADVANCED MANUFACTURING AND GREEN INNOVATION



#### Main Objectives:

- Analyze open business models and services in advanced manufacturing & green innovation
- Set up Circular Economy Advanced Manufacturing Open Business Model Platform
- Develop a knowledge base and guidelines for implementing CE strategy in AM



- Circular Economy Strategy
  Workshop I & II (Jan/Jun '20)
- Specific Trainings I & II (Jan/Jun `20)



## ADVANCED MANUFACTURING VORARLBERG CIRCULAR ECONOMY APPLICATION FIELDS



"the use of innovative technologies to create existing products and the creation of new products, including production activities that depend on information, automation, computation, software, sensing, and networking"

Circular Economy Hub Vorarlberg

Thematic Scope:

Additive Manufacturing Advanced Materials Robotics/Automation/Artificial Intelligence Nanotechnology Network/IT integration Digital Innovation



### **PILOT ACTIVITIES**



- A1 CE, Open Business Models and Advanced Manufacturing: State-of-the-Art; 07/20
- A2 Best Practice Analysis and Feasibility Study; 11/20
  - Vorarlberg Kreislaufwirtschaft Workshop I & II (Jan/Nov 2020)
  - Smart City Symposium Prague (06/20)



Vorarlberg Kreislaufwirtschaft Workshop II

Vorarlberg Kreislaufwirtschaft Workshop I



### GREEN & DIGITAL INNOVATION SECTORS - VORARLBERG: POTENTIAL IMPACT





# eudent projects: manufacturing dustry, Mobility & Electric ctories, Digital Innovation

# Ongoing..

#### Quadruple Helix Model

- Workshops, Participatory events, Student projects:

# Collaborative business model for circular economy-based advanced manufacturing

*Fields:* Wood and textile industry, Food industry, Mobility & Electric vehicles SMEs, Urban innovation, Smart Factories, Digital Innovation

**Scope:** Lean production technologies, Supply chain integration, Advanced planning and scheduling

Product

Material





Design

Advanced

manufacturing



#### CIRCULAR ECONOMY HUB VORARLBERG UPCOMING PILOT ACTIVITIES



FHV Digital Innovation Centre Vorarlberg PLATTFORM

DORNBRN

**CIRCULAR ECONOMY HUB VORARI BFRG** 







- Lange Nacht der Partizipation (May 2021)
- Projektmarktplatz | & II (June `21/ Feb `22) •
- V-Platform collaboration
- A5-A8 Evaluation, Recommendations and Guidelines (12/21 - 03/22)

## **LESSONS LEARNED**



- Implementing advanced manufacturing as an opportunity to improve decision-making in production processes and material selection (recycled metal, biopolymer or similar renewable biostock).
- Printable materials could serve the purpose of many, also to simplify recupturing and to reduce variety - crucial innovation exposure and knowledge sharing among different actors.
- New design possibilities, simplification of recycling and experience exchange of AM production opportunities in the CE context to external stakeholder network (SMEs, local community, academia, innovation networks, etc.).
- Promotion of circular economy both in manufacturing and non-manufact. sectors crucial.
- Beneficial: Municipal support to businesses with limited internal capacities and resources for launching/testing circular economy products/services (financial, training, courses etc.)

## CITYCIRCLE





- www.interreg-central.eu/CITYCIRCLE
- 🖂 bojana.suzic@fhv.at
- +43 66 77 821 701
- f facebook.com/citycircle

