

# Transition 4.0 Plan

# Technologies, tax credit and the 4.0 innovation network

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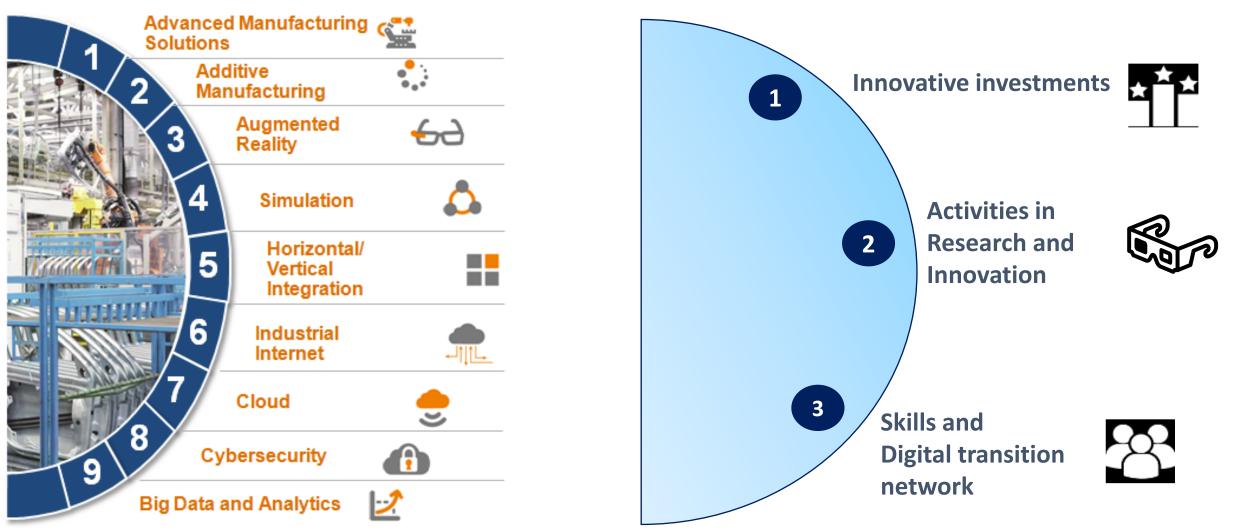
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## From "Industry 4.0 Plan" to "Transition 4.0" (2017 – 2023)

## TECHNOLOGIES

**PILLARS** 

## **Different name, same structure**

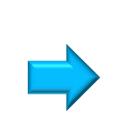


## Industry 4.0 in the National Recovery and Resilience Plan

## **Resources**



€ 13.38 bln. for 2021-22 to support and foster the 4.0 transition *from the National Recovery and Resilience Plan* 



- € 5.8 bln. for 2023 from the *Complementary Fund*

# **Tax credit**

- Material (machines) and immaterial goods (software) with well-defined charateristic and included in specific lists
- Research and Innovation
- Skill acquisition in 4.0 technologies



1. Innovative investments

# **TECHNOLOGIES – CAPITAL ASSETS / 1**

## 1. ASSETS WITH OPERATION CONTROLLED BY COMPUTERISED SYSTEMS AND/OR MANAGED BY SENSORS

## **5 MANDATORY FEATURES:**

- 1. control by means of CNC (Computer Numerical Control) and/or PLC (Programmable Logic Controller),
- 2. interconnection to factory computer systems with remote loading of instructions and/or part programs,
- 3. automated integration with the factory's logistics system or supply network and/or with other machines in the production cycle,
- 4. simple and intuitive man-machine interfaces,
- 5. compliance with the latest occupational safety, health and hygiene parameters

## 2 OUT OF 3 FEATURES TO MAKE THEM COMPARABLE OR INTEGRABLE WITH CYBER-PHYSICAL SYSTEMS:

- 1. remote maintenance and/or remote diagnostics and/or remote control systems,
- 2. continuous monitoring of working conditions and process parameters by means of appropriate sets of sensors and adaptability to process drifts,
- 3. integration features between the physical machine and/or plant with modelling and/or simulation of its behaviour in the process (cyber-physical system)

## **TECHNOLOGIES – CAPITAL ASSETS / 2**

**2. SYSTEMS FOR MONITORING QUALITY AND SUSTAINABILITY** 

E.G. DEVICES FOR METAL DUST TESTING, INTELLIGENT AND CONNECTED MARKING AND TRACEABILITY SYSTEMS FOR PRODUCTION BATCHES AND/OR INDIVIDUAL PRODUCTS

3. SYSTEMS FOR MONITORING AND CONTROLLING MACHINE WORKING CONDITIONS DEVICES FOR MAN/MACHINE INTERACTION AND FOR IMPROVING SAFETY AND ERGONOMICS IN THE 4.0 WORKPLACE

E.G. WORKBENCHES AND WORKSTATIONS EQUIPPED WITH ERGONOMIC SOLUTIONS CAPABLE OF AUTOMATED ADAPTATION TO THE PHYSICAL CHARACTERISTICS OF OPERATORS, SYSTEMS FOR LIFTING HEAVY OR HIGH-TEMPERATURE PARTS, WEARABLE DEVICES, AUGMENTED REALITY DEVICES

## **TECHNOLOGIES – INTANGIBLE ASSETS**

SOFTWARE, SYSTEMS AND SYSTEM INTEGRATION, PLATFORMS AND APPLICATIONS

E.G. SOFTWARE, SYSTEMS, PLATFORMS AND APPLICATIONS FOR AUTOMATED AND INTELLIGENT PRODUCTION; FOR THE USE ALONG PRODUCTION LINES OF ROBOTS, COLLABORATIVE ROBOTS AND INTELLIGENT MACHINES FOR WORKER HEALTH AND SAFETY, END-PRODUCT QUALITY AND PREDICTIVE MAINTENANCE; FOR AUGMENTED REALITY MANAGEMENT VIA WEARABLE DEVICES; FOR THE PROTECTION OF NETWORKS, DATA, PROGRAMMES, MACHINES AND PLANTS FROM ATTACKS, DAMAGE AND UNAUTHORISED ACCESS



## The requirement of Interconnection

**The essential requirement to get tax** credits is the **interconnection** between the machine and production or supplier management software

What do we mean by **«interconnection»**?

- 1. The software exchanges information with **internal IT systems** (ex. management, planning or project systems) **and/or external systems** (ex. client or supplier management, software used with partners for collaborating and codevelopment, etc.) through a connection based on documented standards, publicly available and internationally recognised;
- 2. The software has an **unique identifier**, aimed at identifying the origin of data, through the use of internationally recognised addressing standards (ex. IP address).



# Tax credit for assets

	4.0 MATERIAL ASSETS					
Size of the investment	2021	2022	2023 – 2024 – 2025			
Up to €2.5 mln	50%	40%	20%			
€2.5 – 10 mln	30%	20%	10%			
€10 – 20 mln	10%	10%	5%			

4.0 IMMATERIAL ASSETS									
Year	2021	2022	2023	2024	2025				
Tax credit percentage	20%	20%- 50%	20%	15%	10%				
Expense limit	1 mln euro								



2. Research & Innovation

# Tax credit for Research, Development, Innovation & Design

	Maximum credit	2021-2022	2023	2024	2025	2026- 2031
RESEARCH & DEVELOPMENT	5 mln euro	20% (4mln)	10%	10%	10%	10%
INNOVATION	2 mln euro	10% (2mln)	10%	5%	5%	-
INNOVATION 4.0 AND GREEN	4 mln euro	15% (2mln)	10%	5%	5%	-
DESIGN	2 mln euro	10% (2mln)	10%	5%	5%	-





3. Skills and the network for 4.0 innovation

# THE NETWORK FOR 4.0 INNOVATION

### **Digital Innovation Hubs**

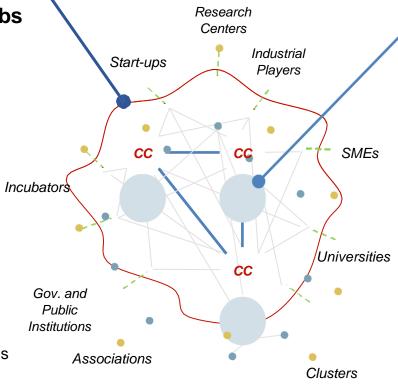
### Features:

•Selected DIH located at Confindustria's and R.E. TE. Imprese Italia's branches

 Contact point between companies, research In institutions and public/private investors

#### **Mission:**

- Create awareness on I4.0 opportunities
- Support in developing
  innovative investment plans
- Orientation to I4.0
  Competence Centers
- Support in accessing to public and private financing solutions/investors



Investors

### **Competence Centres**

### Features:

- Few and selected national Competence Center
- Strong involvement of leading Italian universities and large private players
- Support to key stakeholders (e.g. research institutions, startups,...)
- Mission-oriented and focused on facilitating I4.0 transformational projects in all domains
- Appropriate legal and managerial skills
- No Profit PPP perfectly matching the requirements of a DIH in the Digital Europe Programme

### Mission:

- 14.0 training and awareness
- Live demos on new technologies and access to I4.0
  best practices
- Technical advisory on I4.0 for SMEs
- Launch and acceleration of technological development and innovative projects
- Trial support and "on-site" development of new I4.0
  technologies
- Coordination with Italian CC and National and DIH European Network

# THE DIGITAL INNOVATION HUB OF CONFINDUSTRIA



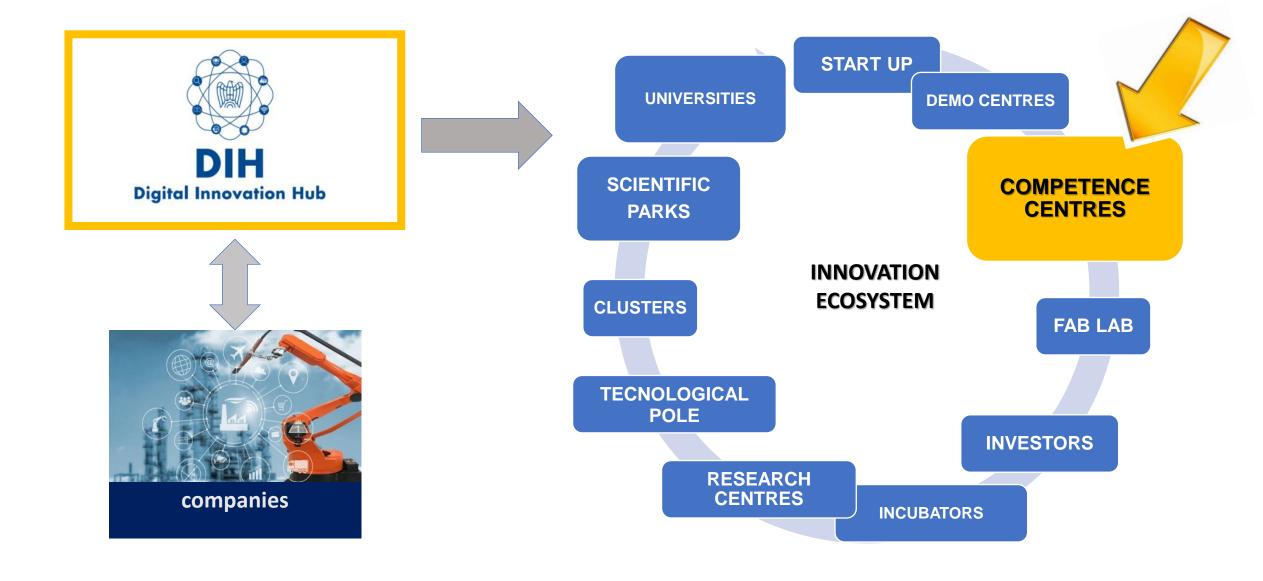
## WHAT THEY DO:

- ✓ Awareness (meeting, workshop, training...)
- ✓ Fostering demand for innovation
- ✓ Digital maturity assessment
- ✓ Orientation towards the innovation ecosystem

## WHAT THEY HAVE DONE SO FAR:

- ✓ Get in touch with 25.000 companies
- More than 900 workshop, one to one meetings, visits at technology centers
- ✓ More than 1.900 assessment
- Supply chain assessment projects with large companies (Ansaldo, Enel, ABB, Hithachi, Leonardo)

## THE DIGITAL INNOVATION HUB OF CONFINDUSTRIA



Thank you for your attention! v.carlini@confindustria.it