





# **Social Dialogue for the Future of Manufacturing**



# **Industry 4.0 in Italy**

# The national plan

## "Industria 4.0" national plan

2017-2020 Strategic guidelines

#### **Key guidelines**



Innovative investments

- Stimulate private investments in new equipment and I4.0 transformation
- Increase private expenditure in R&D
- Patent Box to spur investment in intangible assets
- New corporate finance (non bank lending, VC and PE) for better allocation of capital to innovative firms

#### Skills

- Spread the I4.0 culture through "Scuola Digitale"1 and "Alternanza Scuola Lavoro"<sup>1</sup>
- Develop I4.0 skills through Industrial PhDs and professional education: "Istituti Tecnici Superiori"2
- Create Competence Centers • and network of Digital Innovation Hubs
- National Skill Strategy with OECD

#### **Complementary guidelines**

## Infrastructures

Ensure adequate network infrastructure - Ultra Broadband Plan with a "Fiber to the factory" approach

Enabling

• Cooperate in the definition of IoT open standards and interoperability criteria



#### Public instruments at support

- Attract FDI and support large investments in 4.0
- Reinforce and support internationalization of Italian companies
- Strengthen the productivity-salary taxation exchange through lower taxation on "productivity benefits", negotiated in decentralized bargaining



#### Governance and awareness

Generate interest on I4.0 opportunities and create a public-private governance

1. Work-related learning; 2. Italian professional institutes

# **Resources**

#### **Innovative Investments**

+ 10 billion € Private investments increase from 80 to 90 Bn € in 2017

+ 11,3 billion € of private spending on R&D&I with focus in 4.0 technologies in 2017-2020

#### +2,6 billion €

Volume of early stage private investments mobilized in 2017-2020

#### Competences

#### 200 000

University students and **3000** managers specialized on 4.0 themes **+100%** students enrolled in Technical Institutes on 4.0 themes

#### ~ 1,400

PhD with focus on 4.0 (vs. ~ 5,000 foreseen in NRP)

#### + a number of National competence centres

**Enabling infrastructure** 

#### 100%

of Italian companies with 30 Mpbs coverage by 2020

#### 50%

Of Italian companies with 100Mpbs coverage by 2020

#### 6 consortia

For IoT standards in addition to institutional tables starting from 2017

#### **Public support tools**

#### +0,9 billion € Central guarantee fund reform and refinancing for

2017

#### +1 billion €

Development contracts focused on 4.0 investments

#### +0,1 billion €

Strong investments in digital chains for sale (Piano made in Italy)

Salary exchange – productivity by RAL increase

## **Hyper-Depreciation and Super-Depreciation schemes**

#### Advanced Manufacturing Solutions Additive Manufacturing Augmented <del>60</del> Reality Simulation Horizontal/ 5 Vertical Integration ີ Industrial Internet Cloud 8 Cybersecurity **Big Data and Analytics** シア

#### **Innovative investments**

#### Advantages in plan

# Hyper-Depreciation • Increase of rate for I4.0 investments As is To be 140% 250%

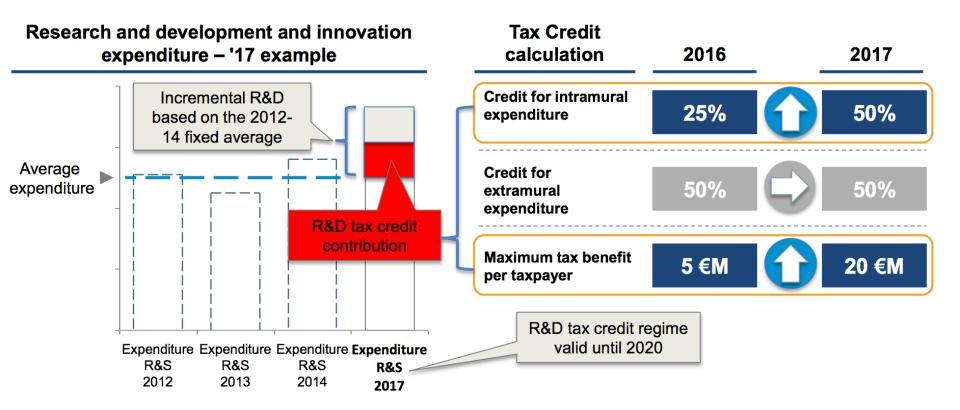
#### Super-Depreciation

- 1 year extension of the Super-Depreciation with a fixed rate (140%)
- · extension to immaterial assets like software

#### Deadline

 In order to guarantee a high appeal of Hyper and Super-Depreciation schemes, item delivery date is prolonged to 30/06/18; however the order and a >20% deposit have to be placed within 31/12/17

# Tax credit for research and development and innovation expenditures





### **Digital Innovation Hubs and I4.0 Competence Centers**

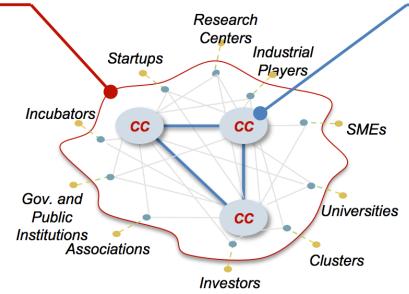
#### **Digital Innovation Hubs**

#### Features:

- Point of contact between companies, research centers and public – private investors
- Selected DIH located at Confindustria's and R.E.TE. Imprese Italia's branches

#### Mission:

- Awareness creation on I4.0 opportunities
- Support in developing innovative investment plans
- Orientation to I4.0 Competence Centers
- Support in accessing public and private financing solutions/investors
- Interactions with European DIHs



#### **I4.0 Competence Centers**

#### Features:

- Few and selected national Competence Centers
- Strong involvement of leading Italian universities and large private players
- Support of key stakeholders (e.g. research centers, startups,...)
- Competence Center focused on specific and complementary technology drivers
- Ad hoc governance and adequate managerial skills

#### **Mission:**

- I4.0 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 European CCs

- North-South dualism
- Dimensional dualism
- Absence of a "work 4.0" plan
- Low process of implementation of Competence Centers
- Weak institutional structure of CC