INVEST IN ITALY:
Right Time, Right Place

INVEST
IN ITALY

ITA
ITALIAN TRADE AGENCY

Ministero dello Sviluppo Economico
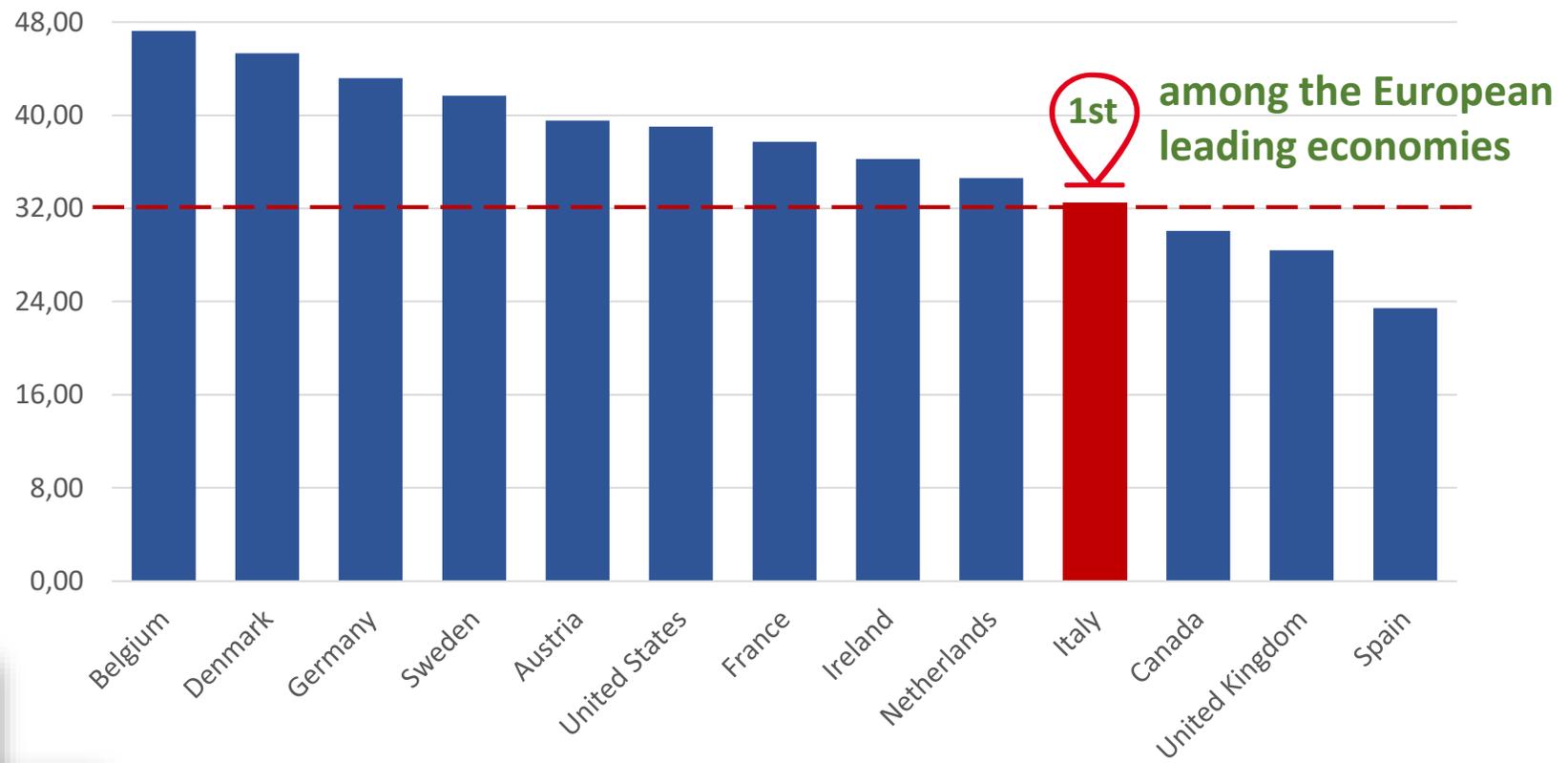
Italy
Smart Tech

• August 2018 •

Labour cost (manufacturing hourly compensation costs; US Dollar)

1st among the European leading economies

Belgium · Denmark · Germany · Sweden · Austria · United States · France · Ireland · Netherlands · Italy · Canada · United Kingdom · Spain

Chart y-axis: 0,00 · 8,00 · 16,00 · 24,00 · 32,00 · 40,00 · 48,00

ITALIAN PUBLIC SMART TECHNOLOGY

Strenghts

New and better occupation and growth of enterprises that work in this sector, through:

•Reinforcement competitiveness, innovation, internationalization;
•Support to research, higher education, design and prototyping;
Collaboration between Public Private Organisations that work in Smart Living Technologies Sector, located in different territories to compare their knowledge and skills with other partners.

The cluster was born to operate at different levels and degrees, and to achieve these objectives:
•Capacity of research and critical mass – scientific excellence in the area of interest;
•Industrial Leadership – number and size of enterprises and their presence in the market;
•Participation of End Users – link to needs of users and consumers;
•Maturity and experience of aggregation – link to integration between research- enterprises- end users- public politics.

Source: http://www.smartlivingtech.it/en

4

ITALIAN PUBLIC SMART TECHNOLOGY

Strenghts

SmartCommunitiesTech is the **Italian Technology Cluster** dedicated to the "Technologies for the Smart Communities". It gathers, in a single synergic system, the key Italian actors that address research, technology transfer and industrial innovation in the field of Technologies for Smart Communities.

The Cluster represents a continuously growing network, and currently groups more than **400 partners** including companies, research centers and local Public Administrations from **eleven Italian regions** (Piemonte, Lombardia, Toscana, Veneto, Liguria, Provincia Autonoma di Trento, Emilia Romagna, Umbria, Lazio, Puglia, Sicilia).

SMART DEVICES

Human movements and activities are increasingly replaced with a delicate purposeful flick of your finger or with your voice

Once there was a remote control…

Smartphones and Wifi freed mankind from cables: Internet is the new 'general channel' and the broadcast is your own life

The beginning of a process:

Automatic gates

Then,

Automatic and remote controlled light switch, security system, music, heater/conditioning system

VIRTUAL ASSISTANTS

amazon alexa

Apple Siri

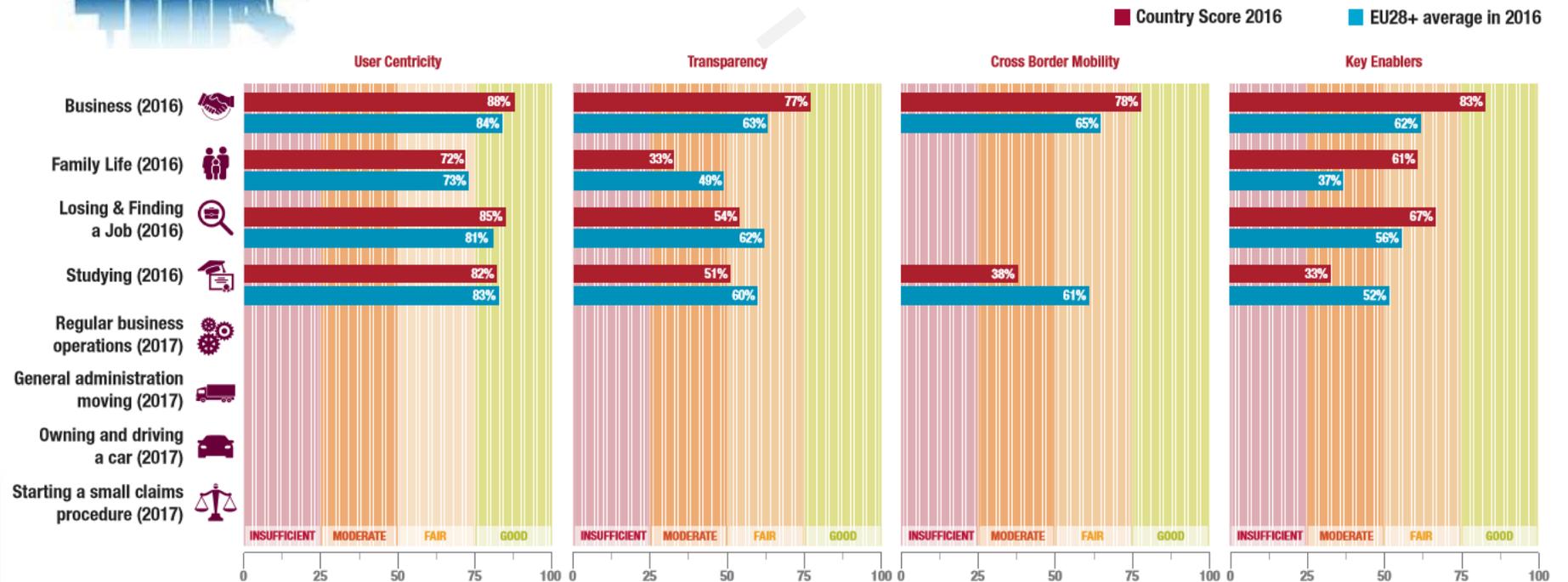Google Assistant

Please do it for me!

6

E-GOVERNMENT

Technological progress is at the service of everyday life

According '**eGovernment Benchmark 2017 Background Report**' Italy is within or over EU average

Legend: ■ Country Score 2016 ■ EU28+ average in 2016

User Centricity

Life event	Country Score 2016	EU28+ average 2016
Business (2016)	88%	84%
Family Life (2016)	72%	73%
Losing & Finding a Job (2016)	85%	81%
Studying (2016)	82%	83%
Regular business operations (2017)		
General administration moving (2017)		
Owning and driving a car (2017)		
Starting a small claims procedure (2017)		

Scale: INSUFFICIENT — MODERATE — FAIR — GOOD (0 25 50 75 100)

Transparency

Life event	Country Score 2016	EU28+ average 2016
Business (2016)	77%	63%
Family Life (2016)	33%	49%
Losing & Finding a Job (2016)	54%	62%
Studying (2016)	51%	60%

Scale: INSUFFICIENT — MODERATE — FAIR — GOOD (0 25 50 75 100)

Cross Border Mobility

Life event	Country Score 2016	EU28+ average 2016
Business (2016)	78%	65%
Losing & Finding a Job (2016)	38%	61%

Scale: INSUFFICIENT — MODERATE — FAIR — GOOD (0 25 50 75 100)

Key Enablers

Life event	Country Score 2016	EU28+ average 2016
Business (2016)	83%	62%
Family Life (2016)	61%	37%
Losing & Finding a Job (2016)	67%	56%
Studying (2016)	33%	52%

Scale: INSUFFICIENT — MODERATE — FAIR — GOOD (0 25 50 75 100)

Source: eGovernment Benchmark 2017 Background Report (November)

The cross-border mobility indicator is not measured for Losing and Finding a Job and Family life
Each life event is measured once every two years

EUROPEAN e-GOVERNMENT INDEX

The five dimensions of the DESI

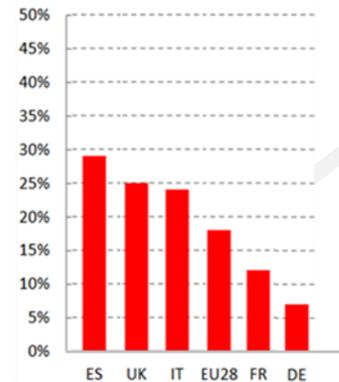| 1 Connectivity	Fixed Broadband, Mobile Broadband, Fast and Ultrafast Broadband and prices
2 Human Capital	Basic Skills and Internet Use, Advanced skills and Development
3 Use of Internet Services	Citizens' use of Content, Communication and Online Transactions
4 Integration of Digital Technology	Business digitisation and eCommerce
5 Digital Public Services	eGovernment and eHealth

Italy ranks 4th among the 6 biggest EU Members for population

E-Government, Focus on **e-Health**

EU Countries (Population over 40 mlns)

In e-Health **Italy ranks 3rd**

Progress of Reforms and Infrastructures

Italy, smart Nation

o Promoting Blockchain technology

o Internet 5g at the latest in 2018

o Last generation Optical fibre (FTTH)

open fiber

•cdp•
cassa depositi e prestiti

enel

Smart
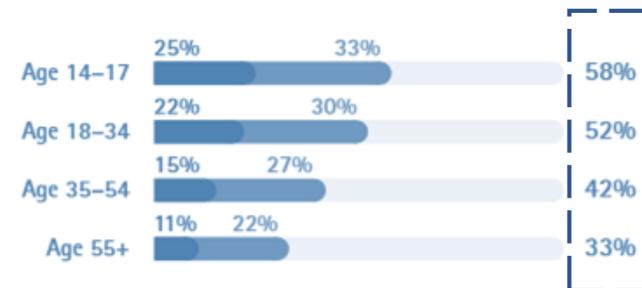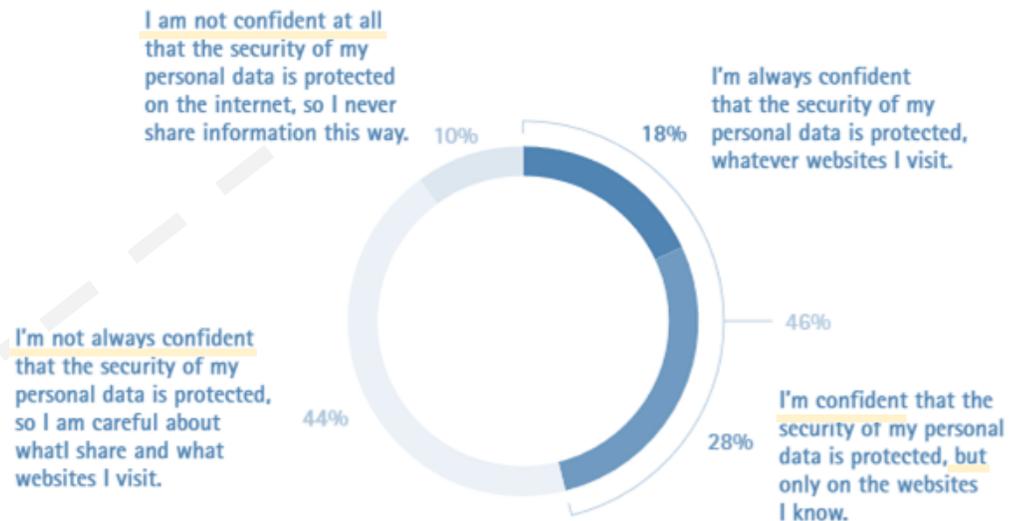COMMUNITIES
Tech

INVEST
IN ITALY

SMART LIVING
TECHNOLOGIES

INTERNET OF EVERYTHING

Smart tech Sector collects all devices and services useful to make life of the user easier through IoT. When applied to urban areas, it is called Smart Cities

From doorbells to lightening, Internet of things is changing the ways people interact with everyday items. It makes life easier with the touch of a smartphone

However

According to a Research on IoT by Accenture, Users are not confident about security and data privacy

I am not confident at all that the security of my personal data is protected on the internet, so I never share information this way.   10%

I'm always confident that the security of my personal data is protected, whatever websites I visit.   18%

I'm not always confident that the security of my personal data is protected, so I am careful about what I share and what websites I visit.   44%

46%

I'm confident that the security of my personal data is protected, but only on the websites I know.   28%

Age 14–17	25%	33%	58%
Age 18–34	22%	30%	52%
Age 35–54	15%	27%	42%
Age 55+	11%	22%	33%

Source: www.industriaitaliana.it; Press

2017 Ultra Broadband

Governance: COBUL Commitee on work

52.4%   100%   (aggregated data)

	Total	30Mbps	100Mbps
Apulia	87%	72,5%	1,1%
Sardinia	80%	48,6%	0,3%
Calabria	77%	67,3%	0,5%
Basilicata	76%	59%	0,5%
Emilia Romagna	75%	49,5%	2,5%
Tuscany	75%	47,4%	4,4%
Campania	74%	51,5%	2,7%
Liguria	73%	47.2%	1.7%
Lombardy	72%	39,4%	18,8%
Lazio	70%	40%	1,9%
Veneto	68%	44,3%	3,2%
Friuli V.G.	58%	39,3%	2,9%
Marche	52%	44,8%	1%

Areas ready to work on FTTH

(already infrastructured)

Mobile
5G
testing

- Milan
- L'Aquila
- Matera
- Bari
- Prato

5G: liberation of the 700 MHz band already planned

Source: http://bandaultralarga.italia.it/mappa-bul/; https://maps.agcom.it/

o **Wearables** (smartwatch, smartglasses, smart rings)

o **Drones**

o **Domotic** (smart mirrors, automatism, domestic sensors)

o **Security** (mobile cameras, face/motion, light, CO… detection)

o **Smarthealth** (medical wearables, sensors, markers…smartpills)

o **Smart Automotive** (driverless vehicles, self-flying airplane/helicopter)

o **Delivery**

Italdesign Pop-up next
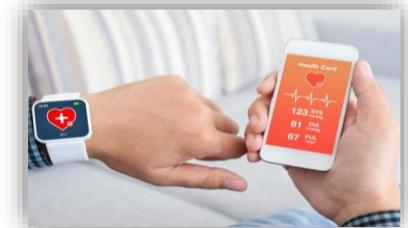
Wall: Management of Risk

Source: Press

Strenghts

The future of Manufacturing

empatica

winmedical

Glass up

aroma technology

Italdron

wesii

Smart Communities Tech

INVEST IN ITALY

SMART LIVING TECHNOLOGIES

Osservatorio Nazionale Smart City
Una iniziativa ANCI in partnership con FORUM PA

ITALIAN SMART CITIES

iFEL

AGENDA URBANA

'Milano 4 You'

Smart Government: projects and investments

Smart Living: projects and investments

Smart Energy: projects and investments

1 — 31

1 — 36

2 — 20
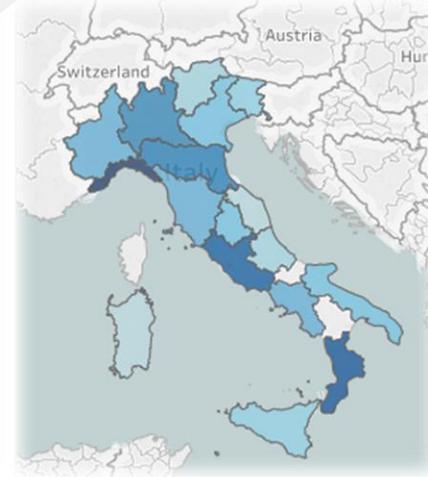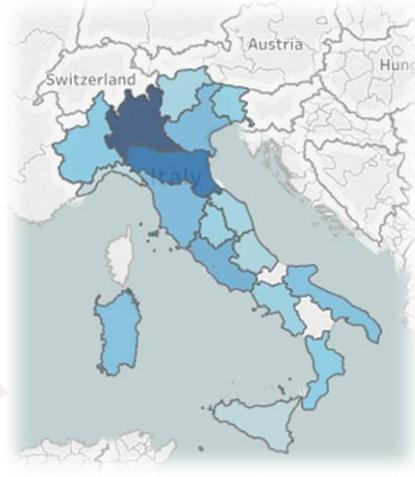
Ranking

Smart Environment:	**37** Emilia Romagna
Smart People:	**37** Emilia Romagna
Smart Living:	**36** Lombardy
Smart Mobility:	**31** Veneto
Smart Government:	**31** Lombardy

Smart COMMUNITIES Tech

INVEST IN ITALY

SMART LIVING TECHNOLOGIES

The Ranking of competitiveness of the Trade Performance Index (sectors/worldwide)

Sectors	ITALY	GERMANY	CHINA	REP. OF KOREA	JAPAN	FRANCE	UNITED STATES	UNITED KINGDOM
Electronic components	2	1	50	14	4	32	54	61
IT & consumer electronics	44	31	6	9	50	45	48	49
Transport equipment	2	1	26	6	14	13	48	33
Textiles	2	3	1	8	22	45	56	57
Leather products	1	60	2	87	126	35	108	82
Clothing	1	68	2	86	113	69	114	82

Italy is already leader, or better than others

14

NATIONAL TECH CLUSTERS

Ministry of Education, University and Research

MINISTRY OF EDUCATION, UNIVERSITY AND RESEARCH

• AEROSPACE	**ROME**	**http://www.ctna.it/**
• AGRIFOOD	**ROME**	**http://www.clusteragrifood.it/en/**
• GREEN CHEMISTRY	**MILAN**	**http://www.clusterspring.it/home/**
• INTELLIGENT FACTORIES	**BOLOGNA**	**http://www.fabbricaintelligente.it/en/**
• CLUSTER TRASPORTI	**ROME**	**http://www.clustertrasporti.it/**
• LIFE SCIENCE	**MILAN**	**http://www.clusteralisei.it/en/**
• SMART LIVING TECHNOLOGIES	**ANCONA**	**http://www.smartlivingtech.it/en**
• SMART COMMUNITIES TECH	**TURIN**	**http://www.smartcommunitiestech.it/en/**
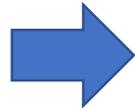
What's coming next…

- HERITAGE TECH
- DESIGN, MADE IN ITALY
- SEA ECONOMICS
- ENERGY

ITALIAN TECHNOLOGY INSTITUTE

National Foundation financed by the State to conduct scientific research for the purpose of technological development. IIT aims to promote excellence in basic and applied research and to promote the development of the national economy.

IIT's production includes **8569 publications**, over **150 European projects** and **17 ERC** (European Research Council) **projects**, more than **500 active patent applications**, **17 established start-ups** and 26 under due diligence.
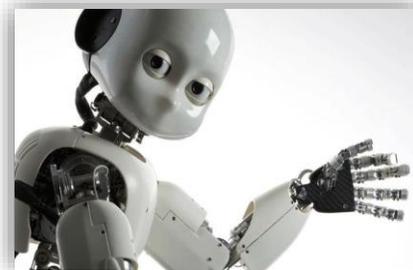
Since 2009, the Institute's scientific activity has been further strengthened with **the creation of eleven IIT research centres in Italy** (in Turin, two in Milan, Trento, Rome, two in Pisa, Naples, Lecce, Ferrara) and **two outstations located abroad** (MIT and Harvard in the US)

iit ISTITUTO ITALIANO DI TECNOLOGIA

11 scientific programs of three types:

Technology Programs, primarily imed at developing High tech research in collaboration with external entities and industries: **Portable Energy**, **Robotic Rehabilitation**, **Graphene**

Core Programs, dedicated to the basic research activities traditionally developed by IIT : **Brain Science**, **Robotics**, **New Materials**, **Materials Chemistry**

Cross Disciplinary Programs, primarily devoted to high risk-high return research both basic or applied: **Interaction**, **Health Technologies**, **Nano-Bio Photonics**, **Computation**
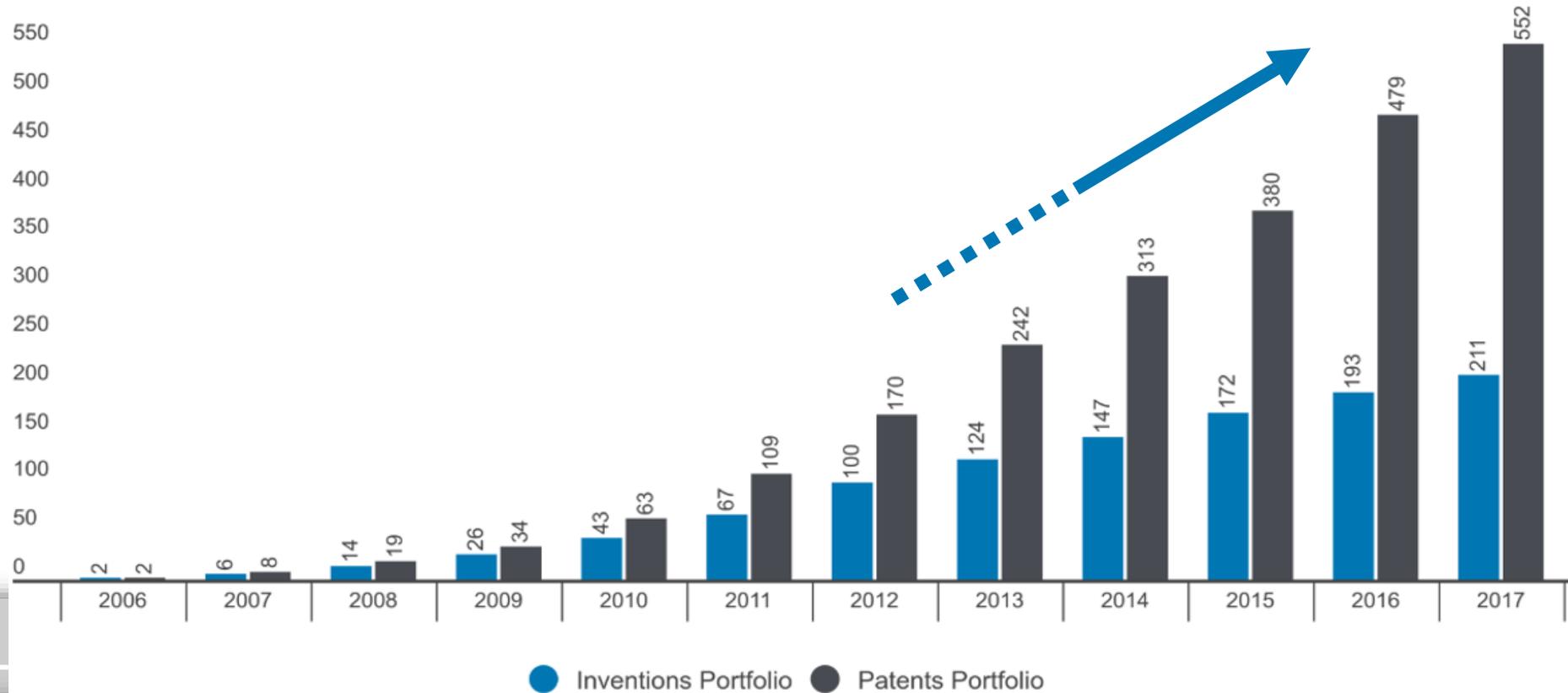
Source: https://multimedia.iit.it/asset-bank/assetfile/9590.pdf

TECHNOLOGY TRANSFER (Inventions and Patents)

Strong Points

Year	Inventions Portfolio	Patents Portfolio
2006	2	2
2007	6	8
2008	14	19
2009	26	34
2010	43	63
2011	67	109
2012	100	170
2013	124	242
2014	147	313
2015	172	380
2016	193	479
2017	211	552

● Inventions Portfolio ● Patents Portfolio

Source: https://multimedia.iit.it/asset-bank/assetfile/9590.pdf (August, 31st 2017)

Abundant and Skilled Workforce

Mainstay

Italy has some of the world's best engineering universities. Indeed, engineering is the 2nd highest course for enrolment in the country – **225,619** currently studying an engineering discipline.[1]

The Technological Departments of the Italian Universities annually produce a pool of graduates with the knowledge and industry experience to immediately enter the work force.

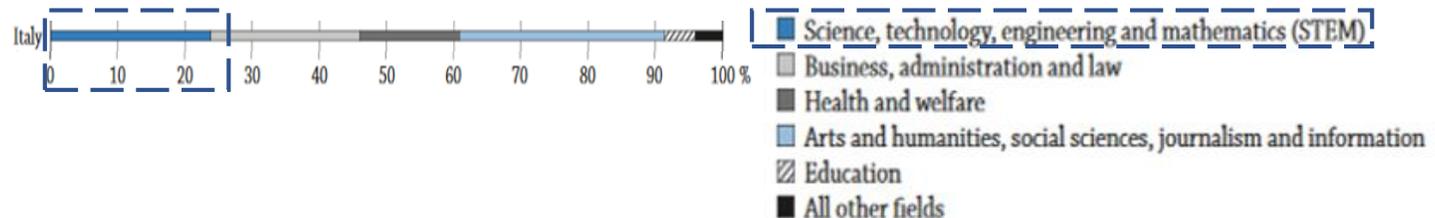The engineering sector currently employs around 417,000 people in Italy.[3]

And much more.

Tertiary-educated 25-64 years old (2016) – Fiels of study

- Science, technology, engineering and mathematics (STEM)
- Business, administration and law
- Health and welfare
- Arts and humanities, social sciences, journalism and information
- Education
- All other fields

Companies Associations:

http://www.confindustriadigitale.it/

http://www.anitec-assinform.it/

http://www.confindustriasi.it/fed/sezione19.html

…and much more

ITALIAN INNOVATION DAYS, ASIA AND...

NORTH AMERICA

BIAT Sections
Aerospace
Environment
Biotechnologies
Greentech
ICT
Nanotechnologies
New materials
Mechatronics
Smart Communities technologies

Smart Technology

Industry trade shows and events:

Italian Trade Agency
Via Liszt, 21
00144 Roma
fdi@ice.it
www.ice.it

Thank you for your attention