

2 May 2018

### **RESEARCH AND INNOVATION**



## WHY IS THIS A PRIORITY?

EU support for research and innovation adds value by encouraging cooperation between research teams across countries and disciplines that is vital in making breakthrough discoveries. It allows the EU to deliver on priorities such as the Paris Agreement on climate change.

#### THANKS TO EU FUNDING:



NEW PLANETS HAVE BEEN DISCOVERED



MAJOR ADVANCES HAVE BEEN MADE ON CANCER TREATMENT



1.6 MILLION EBOLA VACCINE DOSES ARE AVAILABLE



A BATTERY 100 TIMES MORE POWERFUL THAN ORDINARY ONES HAS BEEN DEVELOPED



HYDROGEN FUEL CELL POWERED BUSES ARE BEING TESTED IN OUR CITIES

## WHAT NEXT?



3D PRINT YOUR DREAM HOUSE

# WHAT DOES THIS MEAN IN FINANCIAL TERMS?

Building on the success of the EU's past flagship research and innovation programmes, the Commission proposes to increase investment in research and innovation by allocating €114.8 billion from the future long-term EU budget.

Digital Europe Programme & Connecting Europe Facility - Digital

International Thermonuclear Experimental Reactor (ITER)

Euratom Research and Training Programme

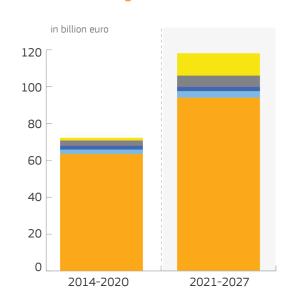
Innovation Window InvestEU Fund

Horizon Europe

Source: European Commission

*Note:* Compared to the Multiannual Financial Framework 2014-2020 at EU-27 (estimate)

### Investing in the future





## WHAT IS NEW IN THE COMMISSION PROPOSALS?

**Horizon Europe**, with a budget of **€97.6 billion**, is the biggest ever research and innovation funding programme. It is designed around three pillars:

- the Open Science pillar supports researchers through fellowships and exchanges as well as funding to projects defined and driven by researchers themselves, through the European Research Council and the Marie-Skłodowska-Curie actions.
- The **Global challenges pillar** directly supports research relating to societal challenges, setting EU-wide missions with ambitious goals around issues that worry us daily such as such as the fight against cancer, clean mobility and plastic-free oceans. Industrial leadership will be prominent within this pillar and throughout the programme as a whole.
- The Open Innovation pillar aims to make Europe a front runner in market-creating innovation. A European Innovation Council will offer a one-stop shop for high potential and breakthrough technologies and innovative companies with potential for scaling up.

**Open Science** 

Global challenges



**Open Innovation** 



Horizon Europe will have simpler rules, cutting red tape for beneficiaries.



# HOW ELSE WILL THE FUTURE EU BUDGET MAKE A DIFFERENCE IN THIS AREA?

- NestEU provides an EU guarantee mobilise public and private financing in the form of loans, guarantees, equity or other market-based instruments, to strategic investments in the support of Research and Development through a dedicated investment window. With a contribution from the EU budget of €15.2 billion, InvestEU will mobilise more than €650 billion of additional investment across Europe.
- **EU Cohesion Policy** plays an important part of the EU funds for Research & Innovation through an increased focus on innovation and Smart Specialisation strategies. The "Seal of Excellence" allows projects successfully evaluated under Horizon Europe to be funded at regional level under the European Structural and Investment Funds.
- The new European Defence Fund, with an overal budget of €13 billion, will boost Europe's ability to protect and defend its citizens. It will offer EU funded grants for collaborative projects which address emerging and future defence and security threats and bridge technological gaps.
- ITER, the International Thermonuclear Experimental Reactor, is a first-of-a-kind, long-term project to build and operate a reactor to test the feasibility of fusion as an energy source. €6 billion will be allocated to it.
- The **Euratom** Research and Training Programme funds research and training on the safety of nuclear energy production.
- The new Digital Europe Programme, with €9.2 billion aims to bring the benefits of the digital transformation to all European citizens and businesses. The programme will boost frontline investments in high-performance computing and data, artificial intelligence, cybersecurity and advanced digital skills. It will promote large-scale deployment of digital technologies across economic sectors and it will support the digital transformation of public services and businesses.

### **EXAMPLE OF A SUCCESSFUL RESEARCH PROJECT:**

#### **EBOLA VACCINES**

New life-saving treatments, diagnostics, and a vaccine have been developed thanks to funding the EU mobilised for emergency of the recent Ebola outbreak. Thousands of people have been protected against Ebola with a vaccine developed by Johnson & Johnson working with the EU-funded 'EBOVAC' project. Over 1.6 million doses of the vaccine are stockpiled for use in case of emergency.

