

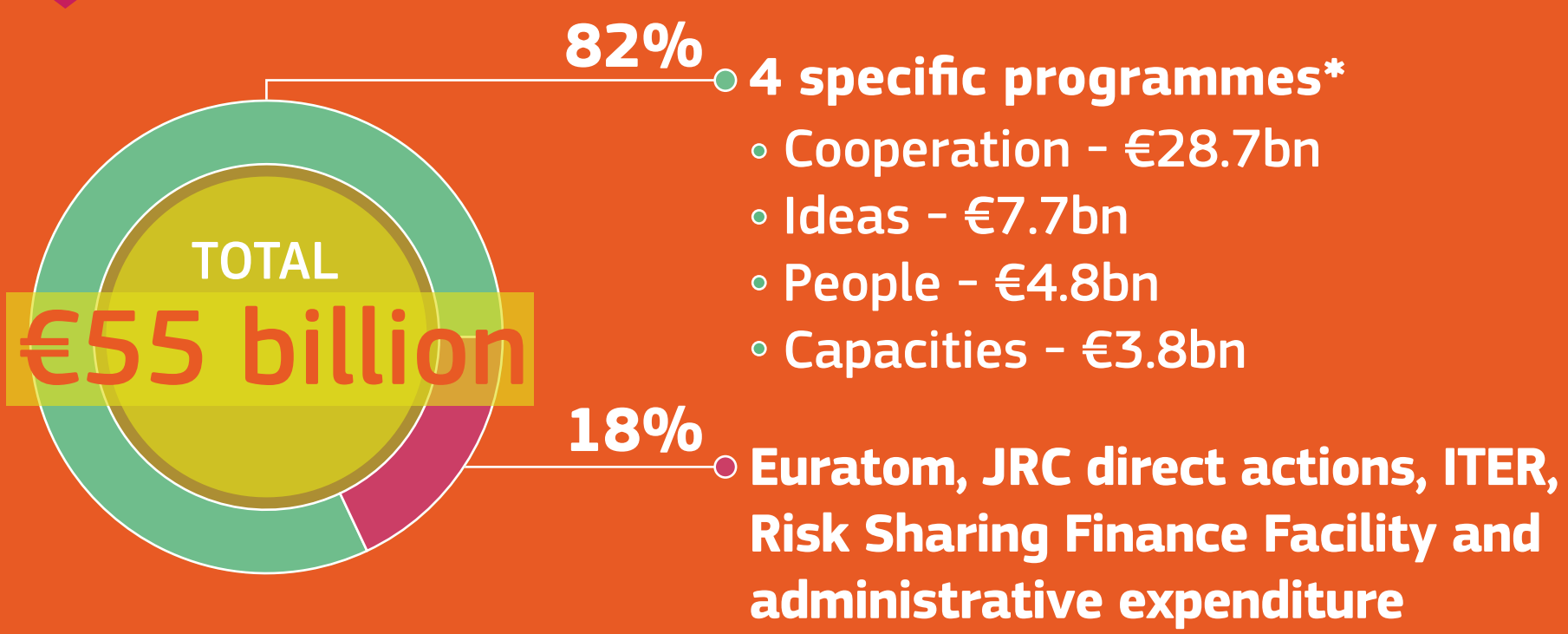
EU RESEARCH FUNDING 2007-2013 7TH FRAMEWORK PROGRAMME

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10 KEY FACTS

1 BUDGET



*Scope of the FP7 ex post evaluation

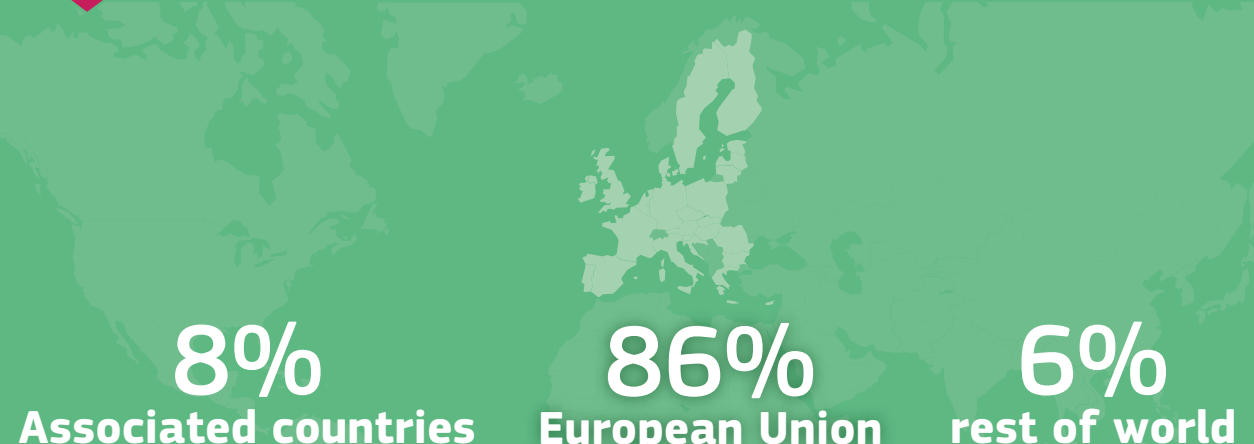
2 PROJECTS



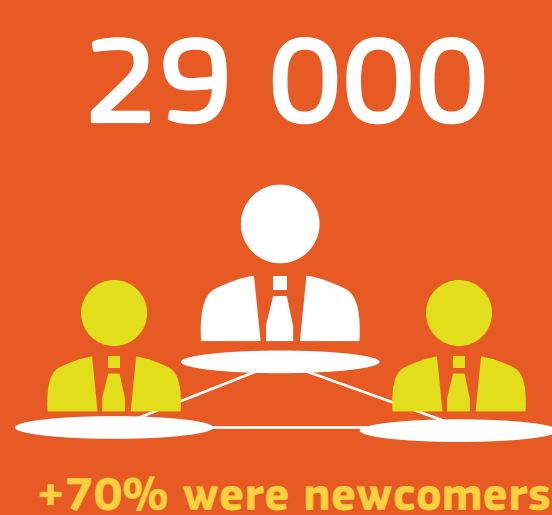
3 PARTICIPATIONS



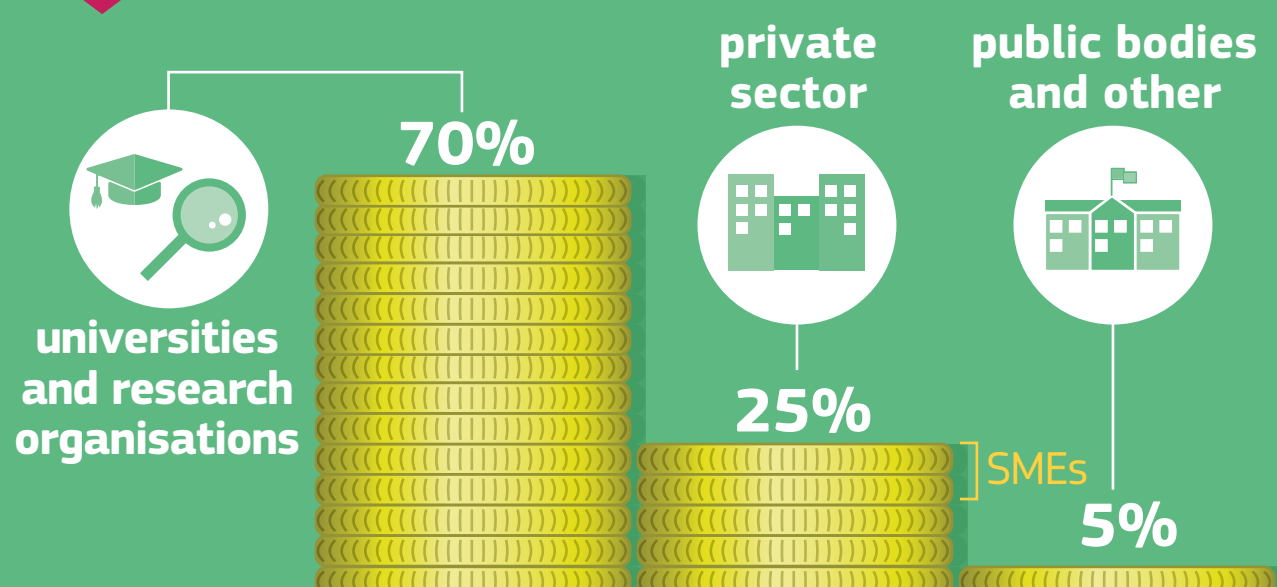
4 BY LOCATION



5 ORGANISATIONS



6 FUNDING



7 SME SUPPORT



8 SAVINGS



9 GENDER EQUALITY



10 SUSTAINABLE DEVELOPMENT



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EVALUATION SNAPSHOT

MAIN FINDINGS OF THE EX-POST EVALUATION OF FP7:

SCIENTIFIC EXCELLENCE



1700

patent applications so far



170 000

publications



up to **30%**
of publications

rank among the

TOP 5%

highly-cited

publications

in their disciplines

well above the EU and US averages

SUPPORT FOR SMALL BUSINESSES

€6.4bn

for SMEs

surpassing the 15% target set
for the Co-operation Programme

VALUE ADDED



most projects

would not have gone ahead
without FP7 investment



**big and complex
research**

could only be carried out
at EU level



**created durable
research and
innovation networks**

across borders, sectors
and disciplines



**helped EU countries
align research
agendas**

including through **common
research agendas and joint
calls**, and by mobilising
€2.75bn in national funding

But... FP7 could still have been further
simplified and different components
operated too much in isolation.

COHERENCE

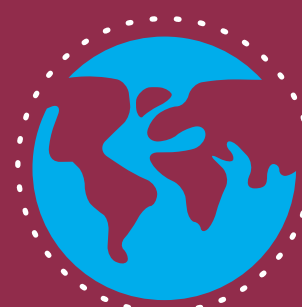
CONTRIBUTION TO
SUSTAINABLE DEVELOPMENT

76%
of funding



75%
of topics

69%
of projects



open to the world

involved participants from

170 countries

**worked with
other EU policy
initiatives**



such as the Competitiveness and
Innovation Programme,
and Structural Funds

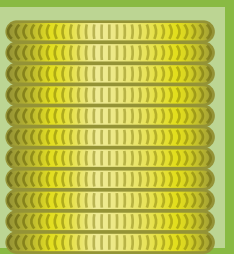
But... there could have been
greater synergies

EFFICIENCY

ECONOMIC BENEFITS

€1 spent =

€11



estimated direct and indirect economic
effects from innovations, new technologies
and products.

SIMPLIFICATION



Reduced costs for participants

=

saved +€550m

compared to FP6

But... some administrative rules were still
too complex, particularly for SMEs

RELEVANCE



Took actions

in response to the
economic crisis



**Addressed societal
challenges**

e.g. food safety, climate change,
health



Invested €45.3bn

in 25 282 projects
in 4 specific programmes

But... could achieve greater scope to adapt
to other unexpected and emerging issues

EFFECTIVENESS

JOBS



+130 000 research jobs/year

+160 000 jobs/year

GROWTH



€500bn in total
over 25 years



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BENEFITTING SOCIETY

INVESTMENT

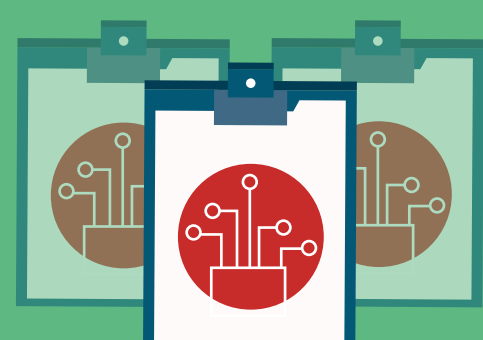
+€28.7 billion

by the Cooperation programme

leading to new technologies and products, improving life
and tackling our biggest challenges, including:

INFORMATION AND COMMUNICATION TECHNOLOGIES

€7.9bn
2328 projects



Advancing the state of the art in:



PHOTONICS



ROBOTICS



ARTIFICIAL
INTELLIGENCE



INTERNET
OF THINGS



QUANTUM COMPUTING

HEALTH RESEARCH

€4.8bn
1008 projects



Improving health care:



NEW SCREENING METHODOLOGIES
for diabetes and Alzheimer's disease



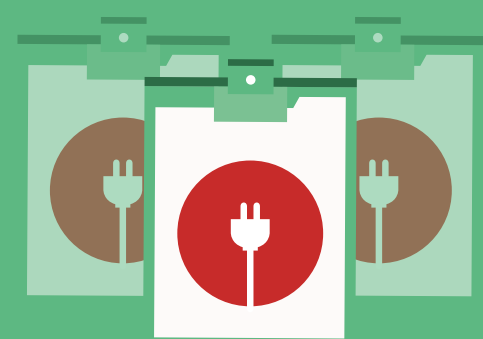
GENOMIC PROGNOSTIC TEST
to avoid unnecessary, expensive
breast cancer treatments



PORTABLE PET SCAN
to measure important body functions
such as blood flow

ENERGY AND ENVIRONMENT

€3.6bn
868 projects



Improving energy efficiency and security of
supply, reducing pollution and addressing
climate change:



INVESTING IN RENEWABLES
solar, wind, biomass addressing



PERFORMANCE OF MATERIALS

SECURITY

€1.3bn
319 projects



Increasing our knowledge:



EXTREME
WEATHER IMPACTS



INTELLIGENCE
AGAINST
TERRORISM



CYBER CRIME AND
CYBER TERRORISM

SOCIO-ECONOMIC SCIENCES AND HUMANITIES

€0.6bn
253 projects



Increasing understanding:



MIGRATION



RADICALISATION



ECONOMIC AND
FINANCIAL CRISIS,
BANKING



INTERNATIONAL
RELATIONS

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FP7 FOR EXCELLENT SCIENCE



134 000
participations
from the EU and worldwide
in **+25 000**
projects

FUNDING FOR MANY AWARD-WINNING RESEARCHERS

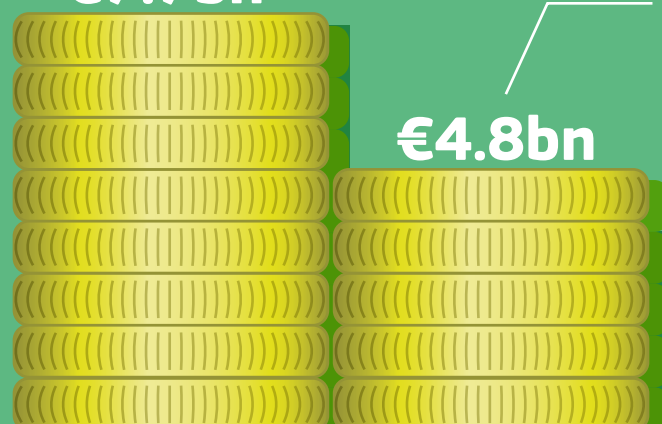
Funding from the European Research Council included:



11 Nobel Laureates and
5 Fields Medallists

ERC
funding excellent
basic research

€7.7bn



€4.8bn

**Marie Skłodowska-Curie
actions** helped boost
the careers and mobility
of 50 000 researchers

46% of researchers
coming to the EU from
industrialised countries
stayed in Europe after
the end of their
Marie Skłodowska-Curie
fellowship



170 000
publications
with world-class results so far



54% in open access

up to **30%**
of publications
rank among the
TOP 5%
highly-cited
publications
in their disciplines

well above the EU28 and US averages

EU RESEARCH FUNDING 2007-2013 7TH FRAMEWORK PROGRAMME

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FUNDING BY EU MEMBER STATE



€45.3bn

awarded through
open calls for proposals

€4.1bn

12 Candidate and
Associated Countries

€40.5bn

28 EU Member States

€644m

Rest of the world

FP7 FUNDING

BE

BELGIUM

€1835m

BG

BULGARIA

€99m

CZ

CZECH REPUBLIC

€289m

DK

DENMARK

€1072m

DE

GERMANY

€7170m

EE

ESTONIA

€95m

IE

IRELAND

€625m

EL

GREECE

€1008m

ES

SPAIN

€3288m

FR

FRANCE

€5213m

HR

CROATIA

€90m

IT

ITALY

€3629m

CY

CYPRUS

€93m

LV

LATVIA

€49m

LT

LITHUANIA

€55m

LU

LUXEMBOURG

€60m

HU

HUNGARY

€292m

MT

MALTA

€21m

NL

NETHERLANDS

€3394m

AT

AUSTRIA

€1188m

PL

POLAND

€440m

PT

PORTUGAL

€522m

RO

ROMANIA

€143m

SI

SLOVENIA

€171m

SK

SLOVAKIA

€78m

FI

FINLAND

€877m

SE

SWEDEN

€1745m

UK

UNITED KINGDOM

€7002m

Note: Statistics as of Nov. 2015

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FP7 FOR GROWTH & JOBS

JOBS



130 000
research jobs/year
indirectly another
160 000 jobs/year



GROWTH



€500 billion
over 25 years
or
€20 billion
in additional annual GDP



PARTICIPATING ORGANISATIONS

EC funding going to:

**universities
and research
organisations**

70%

**private
sector**



25%

**public bodies
and other**



5%

SMEs



SMEs

€6.4bn

surpassing the 15% target set
for the Co-operation Programme

5 JOINT TECHNOLOGY INITIATIVES

Large-scale public-private partnerships boosted
EU-level industrial research and innovation

INNOVATIVE MEDICINES INITIATIVE

50+ consortia for biomedical
R&D, opening up routes to
commercialisation for SMEs

ENIAC

Nanoelectronics innovation,
e.g. for electric cars and
energy efficiency

ARTEMIS

Bringing industry and academia
together to develop new embedded
computing technologies



CLEAN SKY

Helped the aeronautics industry
turn demonstrator projects into
new products - tested two new
engine designs

FUEL CELLS AND HYDROGEN

Putting Europe at the forefront of
clean transport, deploying:

- 150 new types of cars
- 45 buses types
- hydrogen refuelling stations

3 CONTRACTUAL PUBLIC-PRIVATE PARTNERSHIPS

To boost industry participation in FP7



Factories of the Future



Energy-efficient Buildings



Green Cars

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BOOSTING RESEARCH CAPACITY



50 000 researchers
supported by Marie Skłodowska-Curie actions
including **10 000 PhD candidates**
from **140 countries**
— more than 30% from outside the EU

SUPPORTED THE DEVELOPMENT OF RESEARCHERS' CAREERS



95/100 grant recipients in employment
2 years after the end of their fellowships



COMBINED THE BEST TALENT



doubled share of researchers participating
in projects from different disciplines



INCREASED EUROPE-WIDE COLLABORATION AND NETWORKING



29 000 organisations participated

72% were newcomers



FP7 invested
€1.5bn
in research infrastructures



Capacities-Regions of Knowledge programme
improved the research and innovation capacity of
Europe's regions with **€127 million funding in
84 projects.**



The 13 Member States that
joined since 2004 received
on average **30% more**
than other Member States
in FP7 funding per million
euros invested nationally
in R&D.



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DISPELLING SOME MYTHS

CLAIMS ABOUT FP7

EVALUATION BY INDEPENDENT EXPERT GROUP

“

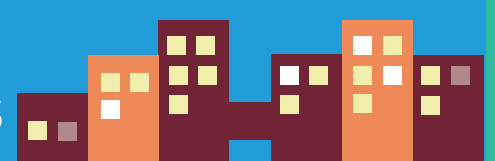
FP7 is only suitable for large industry organisations and big universities

”

Participation

12 400+

- SMEs
- Smaller research bodies
- Civil society organisations



“

FP7 is only about science and technology; there are no funding opportunities for other scientific disciplines

”

A large share of the Cooperation theme focused on science and technology, but this is not the whole picture.



Socio-economic sciences and humanities

€580m from the Cooperation programme and 15% of ERC grants



No restrictions on discipline in the People programme for training and career development



€288m

to boost Science in Society, in areas like education, gender equality and public engagement



€1.5bn

investment in research infrastructures

“

For a successful project proposal, it is necessary to include partners from almost all EU countries

”

FP7 did not have a quota system or make it a pre-condition to include specific EU countries.

The average collaborative project had partners from 6 different countries.



“

To win a grant, it is important to have good contacts to lobby

”

Independent panels of experts reviewed and evaluated proposals, ensuring:



Sound and objective evaluation of a project's quality



Lobbying is impossible

“

FP7 projects are so work-intensive that they fail to produce scientific publications

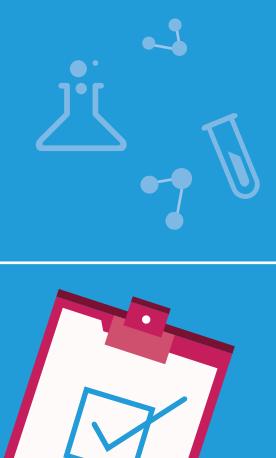
”



+ 170 000 scientific publications published to date

on average

6.8 publications/funded project



“

FP7 does not fund the most innovative ideas, rather well established researchers

”



All proposals were evaluated according to their scientific and/or technological excellence



more than 70% of participants were newcomers

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WHAT'S NEXT

RECOMMENDATIONS BY INDEPENDENT EXPERTS

IN ADDITION TO MEASURES ALREADY TAKEN IN HORIZON 2020, THE COMMISSION WILL:



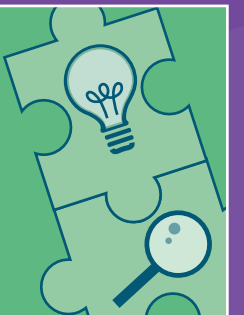
Focus on critical challenges

Support open innovation, open science and openness to the world. Maximise synergies between different areas of research and innovation and new digital technologies, and explore the idea of a European Innovation Council



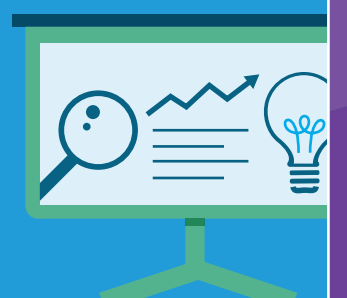
Align research and innovation agendas across Europe

Help Member States to reform their research and innovation strategies through the Policy Support Facility, and ensure that Commission proposals support innovation



Build synergies with other research and innovation funds

Coordinate effectively between different sources of EU funding, and introduce a second wave of simplification to make it easier to access financing



Bring science to citizens

Strengthen open access to research publications and data, and get more citizens involved in defining research strategies and topics



Monitor and evaluate funding results

Support Member States in assessing the impact of funding, and explore how new text and data mining tools can improve monitoring and evaluation



http://ec.europa.eu/research/evaluations/index_en.cfm

Find out more: <http://ec.europa.eu/programmes/horizon2020/>



<https://www.facebook.com/innovation.union>



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@Moedas