

The R&D&I dimension of the Green Deal – Horizon Europe supporting the Green Deal in relation to innovation



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Europe's moment: Repair & Prepare for the Next Generation #NextGenerationEU

The European Green Deal as the EU's recovery strategy:



A massive renovation wave of our buildings and infrastructure and a more circular economy, bringing local jobs;

- *Rolling out renewable energy projects, especially wind, solar and kick-starting a clean hydrogen economy in Europe;*

- *Boost uptake of offshore renewable energy and better integrate the energy system;*



Cleaner transport and logistics, including the installation of one million charging points for electric vehicles and a boost for rail travel and clean mobility in our cities and regions;

- *Strengthening the Just Transition Fund to support re-skilling, helping businesses create new economic opportunities, and investing in the clean energy transition.*





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- *...reflecting the crucial role of research and innovation in driving the shift towards a clean, circular, competitive and climate neutral economy.*
- *Research and innovation will be essential.... to strengthen our autonomy and leadership in value chains.*
- *As Europe sets off on its path to recovery towards a greener, digital and more resilient economy and society, the need to improve and adapt skills, knowledge and competences becomes all the more important.*
- *Focus on unlocking investment in clean technologies and value **chains**... invest in technologies key for the clean energy transition, such as renewable and energy storage technologies, clean hydrogen, batteries, carbon capture and storage and sustainable energy infrastructures.*



Investing in a green, digital and resilient Europe

Supporting Member States to recover



- Recovery and Resilience Facility
- Recovery Assistance for Cohesion and the Territories of Europe - REACT-EU
- Reinforced rural development programmes
- Reinforced Just Transition Mechanism

Within European Semester framework

- Supporting investments and reforms
- Supporting a just transition

Kick-starting the economy and helping private investment



- Solvency Support Instrument
- Strategic Investment Facility
- Strengthened InvestEU programme

- Supporting key sectors and technologies
- Investing in key value chains
- Solvency support for viable companies

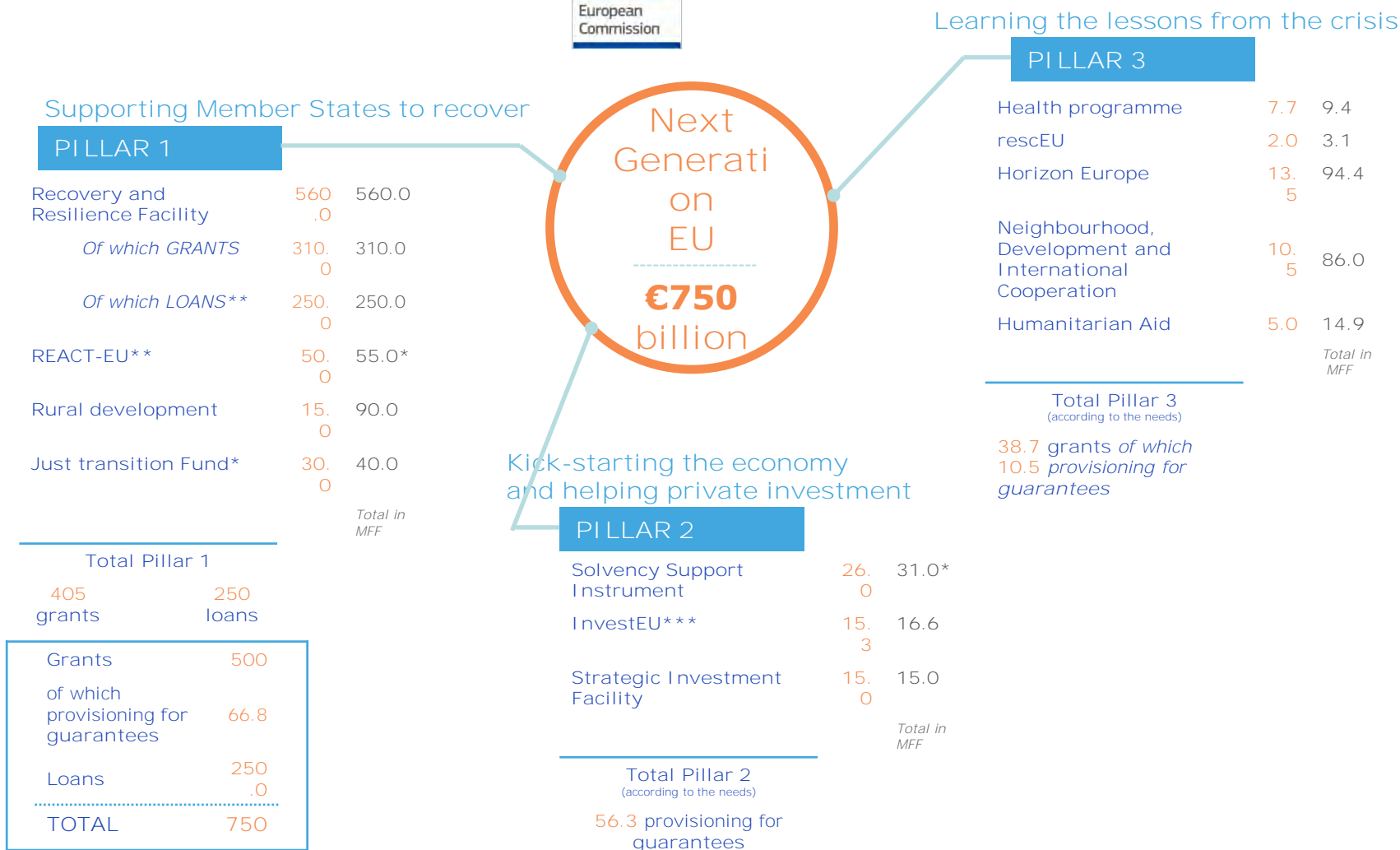
Learning the lessons from the crisis



- New Health programme
- Reinforced rescEU
- Reinforced programmes for research, innovation and external action

- Supporting key programmes for future crises
- Supporting global partners





All amounts in EUR billion
Source: European Commission

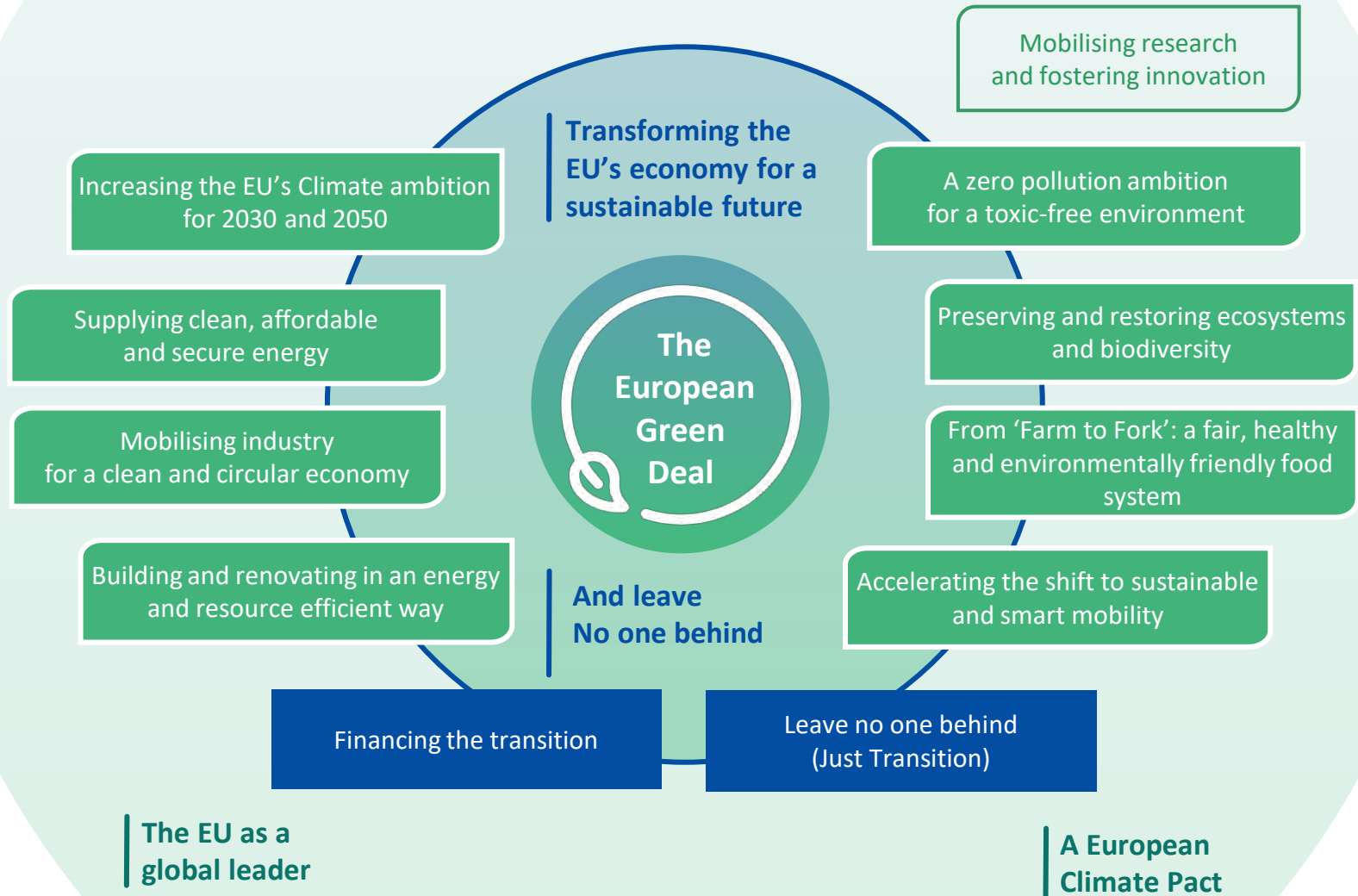
■ Next Generation EU
■ TOTAL (including possible EU budget financing)

*€5 billion out of total of €55 billion for REACT-EU and €5 billion out of €31 billion for the Solvency Support Instrument are under MFF 2014-2020

**The national allocations are not currently available

***For the four policy windows already agreed by the co-legislators; Including €1.5 billion for the capital increase of the European Investment Fund

The European Green Deal





Commission Work Programme 2020

- *Strategy for smart sector integration (non-legislative, Q2 2020)*
- *Renovation wave (non-legislative, Q3 2020);*
- *Strategy for offshore renewable energy (non-legislative, Q4 2020)*
- *Review the TEN-E Regulation (REFIT in 2020)*



Mobilising R&I in support of the Green Deal and of the Green recovery

- At least 35% of Horizon Europe funding for climate solutions
- Horizon 2020 Green Deal Call of approx €1 billion
- **Four** 'Green Deal missions' (climate adaptation, oceans, cities and soil)
- Several European Partnerships with industry and Member States
- European Institute of Innovation and Technology support to young researchers and innovators
- European Innovation Council focused on radically new, breakthrough products, services and processes
- Data and digital infrastructure in support of the ecological transition

H2020: Green Deal Call

Area 1:
Increasing
Climate
Ambition:
Cross
sectoral
challenges

Area 2:
Clean,
affordable
and secure
energy

Area 3:
Industry for
a clean and
circular
economy

Area 4:
Energy and
resource
efficient
buildings

Area 5:
Sustainable
and smart
mobility

Area 6:
Farm to
Fork

Area 7:
Ecosystems
and
Biodiversity

Area 8:
Zero-
pollution,
toxic free
environment

Area 9: Strengthening our knowledge in support of the European Green Deal

Area 10: Empowering citizens for the transition towards a climate neutral, sustainable Europe

Area 11: International cooperation

Horizon Europe Clusters in 'Global Challenges and Industrial Competitiveness'

Clusters	Areas of intervention	
Health	<ul style="list-style-type: none"> • Health throughout the life course • Non-communicable and rare diseases • Tools, technologies and digital solutions for health and care, including personalised medicine 	<ul style="list-style-type: none"> • Environmental and social health determinants • Infectious diseases, including poverty-related and neglected disease • Health care systems
Culture, creativity and inclusive society	<ul style="list-style-type: none"> • Democracy and Governance • Social and economic transformations 	<ul style="list-style-type: none"> • Culture, cultural heritage and creativity
Civil security for society	<ul style="list-style-type: none"> • Disaster-resilient societies • Protection and Security 	<ul style="list-style-type: none"> • Cybersecurity
Digital, Industry and space	<ul style="list-style-type: none"> • Manufacturing technologies • Advanced materials • Next generation internet • Circular industries • Space, including Earth Observation • Emerging enabling technologies 	<ul style="list-style-type: none"> • Key digital technologies, including quantum technologies • Artificial Intelligence and robotics • Advanced computing and Big Data • Low-carbon and clean industry • Emerging enabling technologies
Climate, Energy and Mobility	<ul style="list-style-type: none"> • Climate science and solutions • Energy systems and grids • Communities and cities • Industrial competitiveness in transport • Smart mobility 	<ul style="list-style-type: none"> • Energy supply • Buildings and industrial facilities in energy transition • Clean, safe and accessible transport and mobility • Energy storage
Food, bioeconomy, natural resources, agriculture and environment	<ul style="list-style-type: none"> • Environmental observation • Agriculture, forestry and rural areas • Circular systems • Food systems 	<ul style="list-style-type: none"> • Biodiversity and natural resources • Seas, oceans and inland waters • Bio-based innovation systems in the EU Bioeconomy





Thank you!

#HorizonEU

<http://ec.europa.eu/horizon-europe>