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# HORIZON EUROPE

THE EU  
RESEARCH &  
INNOVATION  
PROGRAMME 2021 – 27



Research and  
Innovation

# Overview

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- Policy context
- Horizon Europe
- Africa Initiative
- EU-AU Innovation Agenda





# Global approach to research & innovation

*Europe's strategy for international cooperation in a changing world\**

## WHAT IS THE AIM OF THE GLOBAL APPROACH TO RESEARCH AND INNOVATION (R&I)?

To preserve openness in research and innovation international cooperation while promoting a level playing field and reciprocity underpinned by fundamental values.

To strengthen multilateral partnerships to deliver new solutions to green, digital, health and innovation challenges.



## HOW WILL THIS BE ACHIEVED?

Modulating bilateral cooperation in line with European interests and values and EU's open strategic autonomy.

Accelerating sustainable and inclusive development, and the transition to resilient, knowledge-based societies and economies in low and middle-income countries.

Using a *Team Europe* approach, with actions by the EU, its financial institutions and Member States.



# International cooperation in R&I: EU-AU policy background



THE AFRICA-EU PARTENRSHIP  
LE PARTENARIAT AFRIQUE-UE

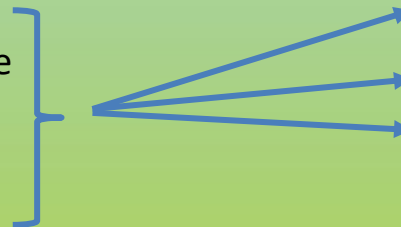


## High-Level Policy Dialogue (HLPD) on STI

Official bi-annual dialogue platform on STI policy exchange and definition of joint STI priorities

### Three EU/AU HLPD working groups

- Food and Nutrition Security and Sustainable Agriculture
  - Climate Change and Sustainable Energy
  - Innovation – cross cutting
- Plus the European and Developing Countries Clinical Trials Partnership (EDCTP)



## EC Joint Communication “Towards a comprehensive strategy with Africa”

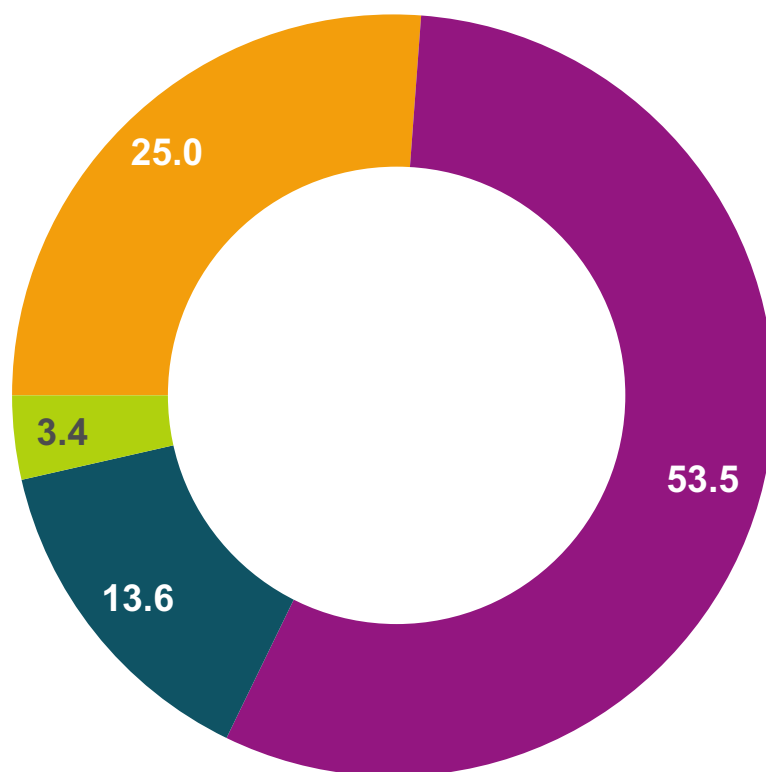
Proposed by EC in 2020 for **2021-2040 period**

### 5 newly proposed EU-Africa Partnerships:

1. Green transition and energy access
2. Digital transformation - cross cutting
3. Sustainable growth and jobs
4. Peace and governance
5. Migration and mobility

# Horizon Europe Budget: €95.5 billion (2021-2027)

(including €5.4 billion from NGEU – Next Generation Europe – programme of EU for Recovery from COVID-19 crisis)



*€ billion in current prices*

- Excellent Science
- Global challenges and European ind. comp.
- Innovative Europe
- Widening Part and ERA

# HORIZON EUROPE

# EURATOM

## SPECIFIC PROGRAMME: EUROPEAN DEFENCE FUND

*Exclusive focus on  
defence research  
& development*

Research  
actions

Development  
actions

## SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT\*

*Exclusive focus on civil applications*



### Pillar I EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie

Research Infrastructures



### Pillar II GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters

- Health
- Culture, Creativity & Inclusive Society
- Civil Security for Society
- Digital, Industry & Space
- Climate, Energy & Mobility
- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Joint Research Centre



### Pillar III INNOVATIVE EUROPE

European Innovation  
Council

European Innovation  
Ecosystems

European Institute of  
Innovation & Technology\*

## WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation & spreading excellence

Reforming & Enhancing the European R&I system

Fusion

Fission

Joint  
Research  
Center

\* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme



# Horizon Europe

## Africa Initiative

2021 – 2022


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June 2021

# Africa Initiative

*In the first Work Programme of Horizon Europe  
2021-2022*



- Immediate outcome of the first ever **EU-AU R&I Ministerial** (July 2020), it will strengthen **long-term cooperation** in finding solutions to enhance **global public health**, **socio-economic development** and **recovery from the COVID-19 pandemic**.
- A total budget of **~350 MEUR** through **36 topics** under **calls for proposals** targeted at **EU-Africa R&I cooperation**, responding to **four joint policy priorities**:
  1. *Public Health* (40 MEUR) 
  2. *Green Transition* (215 MEUR) 
  3. *Innovation & Technology* (11 MEUR) 
  4. *Capacities for Science* (91.9 MEUR) 
- Adoption of **Horizon Europe Work Programme: 16 June 2021**  
(**EU funding & tenders' portal**).



# 1. Public Health



Calls	Year	Budget (MEUR)
1. Innovative approaches to enhance poverty-related diseases research in sub-Saharan Africa	2021	40

- **EDCTP 3** expected to launch calls for proposals **from 2022**, as part of: EU-Africa Global Public Health Partnership proposal
  - Evolution to a Public-Private Partnership
  - Proposed EU contribution: 800 MEUR, plus leverage of expected 400 MEUR from other sources

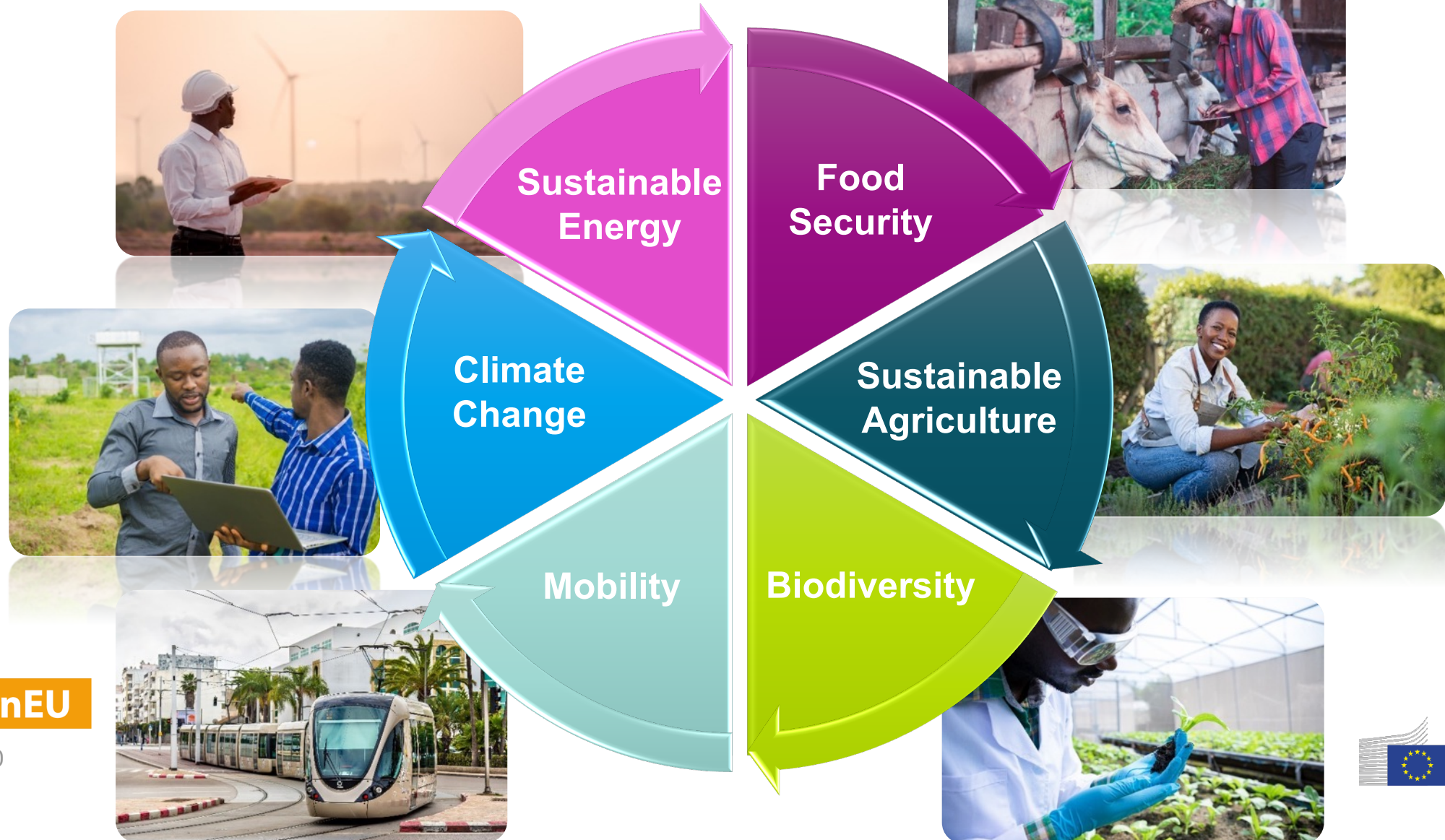


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# 2. Green Transition



R&I areas:



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## 2.1 Green Transition

Calls	Year	Budget (MEUR)
1. Development of high-resolution Earth system models for global and regional climate change projections	2022	20
2. AU-EU Water Energy Food Nexus	2021	5
3. Demonstration of innovative plug-and play solutions for system management and renewables storage in off-grid applications	2022	10
4. AU-EU Energy System Modelling	2022	5



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## 2.2 Green Transition

Calls	Year	Budget (MEUR)
5. New generation of full electric urban and peri-urban Bus Rapid Transit systems to strengthen climate-friendly mass transport (2ZERO)	2022	25
6. Stimulating Road Transport research and innovation dissemination and implementation in Europe and around the World	2022	2
7. Radical improvement of road safety in low and medium income countries in Africa	2021	8



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## 2.3 Green Transition

Calls	Year	Budget (MEUR)
8. One Health approach for Food Nutrition Security and Sustainable Agriculture (FNSSA)	2021	18
9. Agro-ecological approaches in African agriculture systems	2022	28
10. AU-EU Combatting all forms of malnutrition	2022	11
11. African Food cities	2022	12
12. Expertise and training centre on rural innovation	2021	5
13. Socio-economic empowerment of the users of the sea	2021	6





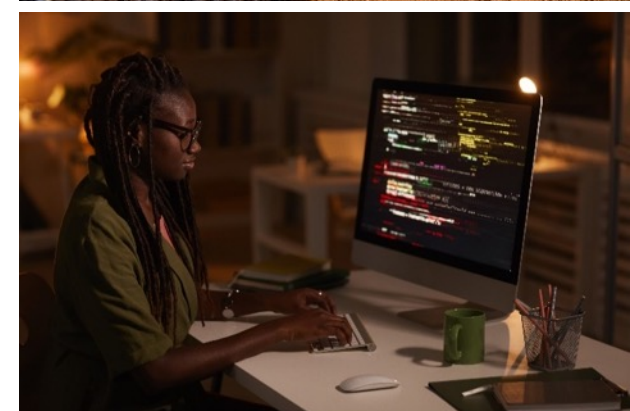
## 2.4 Green Transition

Calls	Year	Budget (MEUR)
14. Quantify impacts of the trade in raw and processed biomass on ecosystems, for offering new leverage points for biodiversity conservation, along supply chains, to reduce leakage effects	2021	10
15. Understanding the impacts of and the opportunities offered by digital transformation, new emerging technologies and social innovation with respect to biodiversity	2021	5
16. Support to processes triggered by IPBES and IPCC	2021	5
17. Network for nature: multi-stakeholder dialogue platform to promote nature-based solutions	2022	6
18. Assessing the nexus of extraction, production, consumption, trade and behaviour patterns and of climate change action on biodiversity in the context of transformative change	2022	12
19. Understanding the impacts of and the opportunities offered by digital transformation, new emerging technologies and social innovation on biodiversity	2021	5
20. Cooperation with the Convention on Biological Diversity	2022	5
21. What else is out there? Exploring the connection between biodiversity, ecosystems services, pandemics and epidemic risk	2021	12



# 3. Innovation & Technology

Calls	Year	Budget (MEUR)
1. Innowwide Bridging Facility	2022	1.5
2. Building EU-Africa partnerships on sustainable raw materials value chains (CSA)	2021	8
3. Strengthen the bilateral cooperation on research infrastructures with Africa: improving the knowledge base on climate change in Africa	2021	1.5



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# 4. Capacities for science



Calls	Year	Budget (MEUR)
1. Global governance for a world in transition: Norms, institutions, actors	2022	9
2. Public policies and indicators for well-being and sustainable development	2022	9
3. Ensuring reliability and trust in quality of Research Ethics expertise in the context of new/emerging technologies	2021	4.5
4. Democratic politics in the EU's neighbourhood	2021	9.9
5. The challenges of research ethics and integrity in response to crisis: the coronavirus pandemic and beyond	2021	4.5
6. Decision-making processes of (aspiring) migrants	2022	9
7. Return and readmission of irregular migrants in the EU	2022	9
8. Gender and social, economic and cultural empowerment	2022	9
9. Improved impact forecasting and early warning systems supporting the rapid deployment of first responders in vulnerable areas	2022	10
10. Support for policy makers – Programme level collaboration between national R&I programmes	2021	10.5
11. Support for policy makers – Programme level collaboration between national R&I programmes	2022	7.5

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# From AEIP to ENRICH in Africa



## EC Service facility AEIP

Duration: 09.2019 - 09.2021

Lead contractor: Technopolis Group (BE)

Partners: 5 Network partners, 30 Tech Hubs

Main pillars:

1. EU-Africa tech hub cooperation and joint activities
2. Tech transfer and commercialization
3. Capacity upgrading
4. Diplomacy and political engagement



## EU H2020 ENRICH in Africa

Duration: 01.2021 - 12.2023

Coordinator: Steinbeis 2i (DE)

Partners: 12 project partners

Main pillars:

1. Set-up of a sustainable Centre and Network for EU-Africa tech hub cooperation
2. Support of tech transfer & commercialization
3. Capacity building and innovation service provision for tech hubs and innovators
4. Diplomacy and political engagement



European  
Commission



# Towards a joint EU-AU Innovation Agenda

- To enhance the impact of R&I on socio-economic development and job creation, a joint **EU-AU Innovation Agenda** was proposed during the first EU-AU R&I Ministerial meeting of July 2020.
- It aims to translate R&I efforts into positive impacts on the ground, to yield **sustainable growth and jobs**, and to develop a long-term and sustainable operational **EU-AU R&I cooperation model**.
- **EU-AU Summit 17-18 February 2022** will be the moment to acknowledge the Innovation Agenda, currently being prepared under the umbrella of the HLPD.
- **EU-Africa Business Forum 16-17 February 2022**, side event on Innovation Agenda.





# Thank you!

For more info:

- European Commission Communication on the Global Approach to research and innovation:  
[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_21\\_2465](https://ec.europa.eu/commission/presscorner/detail/en/ip_21_2465)
- Horizon Europe:  
[https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe\\_en](https://ec.europa.eu/info/research-and-innovation/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe_en)
- European Commission's website on international R&I cooperation:  
[https://ec.europa.eu/info/research-and-innovation/strategy/international-cooperation\\_en](https://ec.europa.eu/info/research-and-innovation/strategy/international-cooperation_en)

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