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Sanayi İşbirlikleri ve Teknoloji Lisanslama Ofisi

Ufuk Avrupa

THREE PILLARS FOR IMPLEMENTATION



Pillar 1 EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



Pillar 2 GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters

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

Joint Research Centre



Pillar 3 INNOVATIVE EUROPE

European Innovation Council

European innovation ecosystems

European Institute
of Innovation and Technology

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system

- Konumlandırma :
İlgili Çağrıların Belirlenmesi & Önceliklendirilmesi

Clusters in 'Global Challenges and European 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

CL4 – Digital, Industry, Space

- **DESTINATION – CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION**
- **DESTINATION – INCREASED AUTONOMY IN KEY STRATEGIC VALUE CHAINS FOR RESILIENT INDUSTRY**
- **DESTINATION – WORLD LEADING DATA AND COMPUTING TECHNOLOGIES**
- **DESTINATION – DIGITAL AND EMERGING TECHNOLOGIES FOR COMPETITIVENESS AND FIT FOR THE GREEN DEAL**
- **DESTINATION – OPEN STRATEGIC AUTONOMY IN DEVELOPING, DEPLOYING AND USING GLOBAL SPACE-BASED INFRASTRUCTURES, SERVICES, APPLICATIONS AND DATA**
- **DESTINATION – A HUMAN-CENTRED AND ETHICAL DEVELOPMENT OF DIGITAL AND INDUSTRIAL TECHNOLOGIES**

Calls

DESTINATION – CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION

Call - CLIMATE NEUTRAL, CIRCULAR AND DIGITISED PRODUCTION 2021

Green, flexible and advanced manufacturing

HORIZON-CL4-2021-TWIN-TRANSITION-01-01: AI enhanced robotics systems for smart manufacturing (IA)

HORIZON-CL4-2021-TWIN-TRANSITION-01-02: Zero-defect manufacturing towards zero-waste (IA)

HORIZON-CL4-2021-TWIN-TRANSITION-01-03: Laser-based technologies for green manufacturing (RIA)

HORIZON-CL4-2021-TWIN-TRANSITION-01-05: Manufacturing technologies for bio- based materials (RIA)

Advanced digital technologies for manufacturing

HORIZON-CL4-2021-TWIN-TRANSITION-01-07: Artificial Intelligence for sustainable, agile manufacturing (IA)

HORIZON-CL4-2021-TWIN-TRANSITION-01-08: Data-driven Distributed Industrial Environments (IA)

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Çağrılar

HORIZON-CL4-2021-TWIN-TRANSITION-01-05: Manufacturing technologies for bio-based materials (RIA)

Specific conditions	
<i>Expected EU contribution per project</i>	The EU estimates that an EU contribution of between EUR 4.00 and 6.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 20.00 million.
<i>Type of Action</i>	Research and Innovation Actions
<i>Technology Readiness Level</i>	Activities are expected to start at TRL 4 and achieve TRL 6 by the end of the project – see General Annex B.

Expected Outcome

Projects are expected to contribute to the following outcomes:

- Demonstrate relevant scale production of innovative bio-based products to substitute **traditional materials with high environmental footprint**;
- Develop products **with similar or better** mechanical, physical and chemical properties, while having a **substantially lower environmental footprint and being sustainable, non- toxic and recyclable** when compared to non-bio-based materials;
- Demonstrate disruptive innovation of bio-based materials production in **at least three different manufacturing value chains**;
- Develop sustainable **business models for materials sourcing and recycling**.

Scope

Research activities should address the following areas:

- **Optimisation and improvement of smart manufacturing processes**, e.g. additive manufacturing, injection moulding, extrusion etc., to unlock the full potential of bio- based materials, such as carbon-positive bioplastics, biopolymers and other fibre-based materials (e.g. cellulose-based components and marine-based components);
- Use of **carbon positive bio-based materials**, such as composite, rubber, plastics, in different products to achieve high technical properties while lowering the environmental footprint;
- Combine **the use of different bio-based materials** to facilitate refurbishing and re- manufacturing of products to achieve circularity by design
- **Adapt existing or new characterisation methods and quality controls** for the bio-based materials in different formats and for new and regenerated products;
- **Support the creation of a skilled workforce**, through training/qualification of personnel, capable of using and implementing biomaterial-based manufacturing activities;
- **Demonstrations and use cases** for transitions towards green manufacturing technologies incorporating bio-based materials with a significant reduction in the environmental footprint across the entire manufacturing and/or product lifecycle.
- **Address standardization activities** of bio-based materials and adapted characterisation methods and quality controls for bio-based materials in their different formats and applications.

- Konumlandırma :
İlgili Çağrıların Belirlenmesi & Önceliklendirilmesi
- Benzer AB projelerinin incelenmesi - [CORDIS](#)

- Konumlandırma :

İlgili Çağrıların Belirlenmesi & Önceliklendirilmesi

- Benzer AB projelerinin incelenmesi – CORDIS
- Çağrı isterlerine göre proje fikri & katkılarınızın çıkarılması
- Altyapı Olanaklarınız

Project Idea

- **The need** (*underlying market need or technical and/or commercial problem?*)
- **Your Solution Idea**
- **The technology** (*The technology that will be developed within your Project?*):


Expertise Contributions to Potential Projects

- **Objectives/activities/roles:** *(What can you deliver for the projects? Please list your possible contributions to possible consortia.)*
- **Skills/Capabilities/Expertise:** *(Please list your skills that will be required to deliver/fulfill the above described contributions)*
- **Related infrastructure**


Expression of Interest


- Kurum Tanıtımı
- Çağrı isterlerine göre proje fikri & katkılarınızın çıkarılması
- Altyapı Olanaklarınız
- İşbirlikleriniz & Networkleriniz
- Önceki (Benzer) Proje Tecrübeniz


Networking


UFUK  **2020**

[dhizlan@sabanciur](#) [.....](#) [>](#) [Üye ol](#) [Şifremi Unuttum](#) [KİM KİMDİR? !\[\]\(d65d67af0d48c0b8df8416565067ed4b_img.jpg\)](#) [EN](#)

 **Ufuk2020 Destekleri**

 **Avrupa Teknoloji Platform ve Ağları**

 **Ufuk2020 Tüm Çağrılar**

 **TÜBİTAK AB ÇP Destek ve Ödülleri**

Avrupa Teknoloji Platform ve Ağları

Ufuk2020 Ağ Yapıları, aynı alanda faaliyet gösteren çok sayıda paydaşın farklı talepleri gündeme getirdiği bir ortamda, bütün paydaşları ortak bir amaç üzerinde birleştirerek (konsorsiyum) temsil etmekte; bu yetisi sayesinde Avrupa Komisyonu tarafından muhatap alınarak AB Çerçeve Programları'nın bütün hazırlık aşamalarında sürece dâhil olmakta; hatta süreci etkileyebilmektedir.

Dolayısıyla, Ufuk2020 projelerinde yer alabilmek için başarı şansı yüksek olan proje konsorsiyumlarına katılmak önem arz etmektedir. Katılımı sağlama yönünde öncelikle, doğru iletişim ağı içerisinde bulunmak kaçınılmaz görünmektedir.

[Avrupa Teknoloji Platformları](#) [Kamu-Özel Sektör Ortaklıkları](#) [Diğer Ağ Yapıları](#) [Bedelsiz Katılım](#) [Tümü](#)


Alanlar

☐ Araştırma Altyapıları


☐ Bilgi ve İletişim Teknolojileri

☐ Çevre ve Ham Maddeler


☐ Enerji

**5G PPP**

5G Haberleşme Teknolojileri
5G PPP

**ACARE**

Avrupa Havacılık Araştırmaları Danışma Konseyi
ACARE

**AIOTI**

Nesnelerin İnterneti İnovasyon İşbirliği
AIOTI

Sabancı
Üniversitesi

Networking

- Ağlar (*Çalışma Grupları*)
- Proje Pazarları
- Önceki İşbirlikleriniz
- Benzer AB Projeleri
- ...

- Horizon 2020 Health Partnering Day 2019

Teşekkürler
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