



## FGT: Horizon Europe Batteries Calls

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TÜBİTAK EU Framework Programmes NCO
Cluster 5-Mobility
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# Horizon Europe Programme Structure



#### SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT

Exclusive focus on civil applications



### Pillar I EXCELLENT SCIENCE

**European Research Council** 

Marie Skłodowska-Curie

Research Infrastructures



Clusters

# Pillar II GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Health

 Culture, Creativity & Inclusive Society

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

Joint Research Centre



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

# Cluster 5: Climate, Energy & Mobility





### **General Features**

Ac	celerate the twin green and digital transitions
	EU Policy Priorities
	15.1 Milyar EUR
	Work Programme: 6 Destination
	Single-Stage & Two Stage (Cliamte-2022) Calls
2	Mission, 11 European Partnerships

## Cluster 5 Work Programme- Overview





# Destination 1 Destin

• Climate Science

Climate science



Destination 2
Cross cutting
solutions

- Batteries
- Cities
- Breakthrough technologies
- Citizen and
- stakeholder
- engagement

#### Destination 3 Energy supply

- Renewable energy
- Energy system, grids and storage
- CCUS
- Cross
- Cutting activities

# Destination 4 Energy demand

- Buildings
- Industry

#### Destination 5

Clean and Competitive solutions for all transport modes

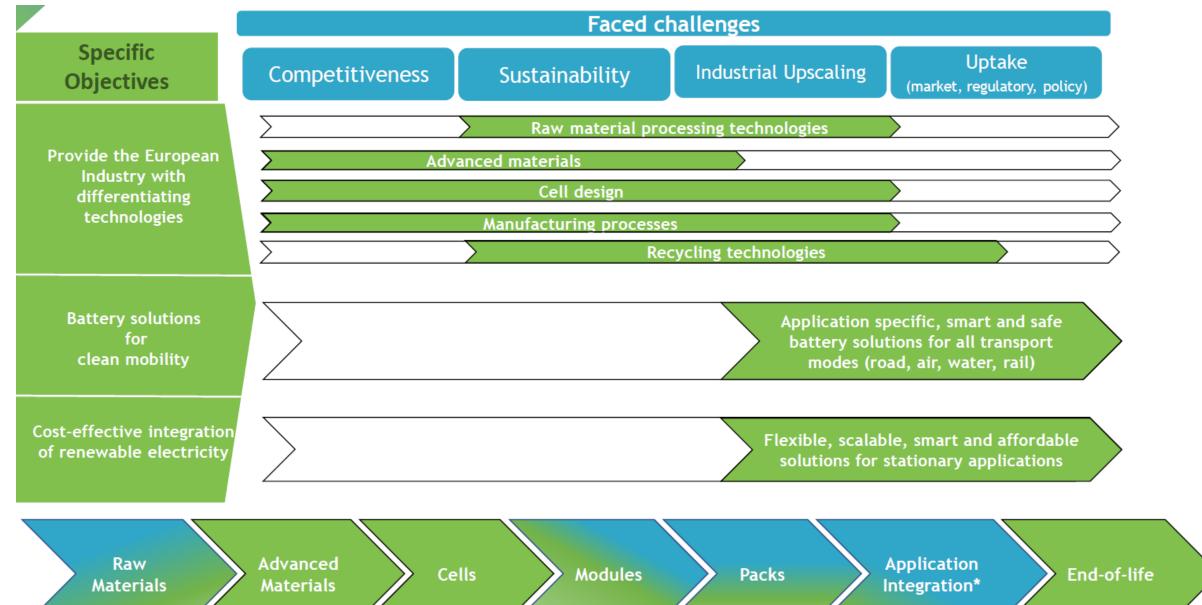
- Zero-emission road transport (2ZERO)
- Aviation
- Waterborne transport (ZEWT)
- Transport related health and environmental issues

# Destination 6 Transport and Smart Mobility services

- Connected, Cooperative and Automated Mobility
- Multimodal and sustainable transport systems for passengers and goods
- Safety and resilience

# D2: Batteries European Partnership





# 1<sup>st</sup> Turkish International Event on Batteries 25.04.2019





# Battery Flagship and Related Battery Calls Advisory Group Meeting 25th April 2019 in Ankara TUBITAK headquarters

- The participants across Europe and Turkey found the chance to get first insight to new Battery Calls.
- The event also enabled the participants to seek out new networking and collaboration opportunities.



- Recent Developments in Integration of TARAL to ERA
- Battery 2030+: A Large Scale Research Initiative on Battery Technologies
- Battery Technologies in Turkey & Horizon2020
   Battery Calls
- Batteries Europe European Technology and Innovation Platform

https://ufuk2020.org.tr/en/news/battery-flagship-and-related-battery-calls-advisory-group-meeting

# Batteries European Partnership Turkey Infoday and Association Mechanism Event 09.11.2020





BATTERIES | Towards a competitive European industrial battery value chain for stationary applications and emobility

A European Partnership under Horizon Europe

- Introduce you the newly established
   'BATTERIES| Towards a competitive
   European industrial battery value
   chain for stationary applications and emobility' Partnership
- Understand the benefits of the BATTERIES European Partnership
- Understand the modalities of possible membership to the BATTERIES European Partnership
- Early integration a number of relevant Turkish stakeholders to the BATTERIES European Partnership from the very beginning

### **2020 Next Generation Battery Calls-Great Success**





### 5 New Project

10 Organization

> 6.2 Million EUR





#### LC-BAT-10-2020:

Next generation and realisation of battery packs for BEV and PHEV

→ ALBATROSS (Advanced Light-weight BATteRy systems Optimized for fast charging, Safety, and Second-life applications)

#### Proje Koordinatörü



#### LC-BAT-10-2020:

Next generation and realisation of battery packs for BEV and PHEV

- → **HELIOS** (High-pErformance moduLar battery packs for sustainable urban electrOmobility Services)
- → **MARBEL** (Manufacturing and Assembly of Modular and Reusable EV Battery for Environment-Friendly and Lightweight Mobility)



LC-BAT-11-2020: Reducing the cost of large batteries for waterborne transport

→ **SEABAT** (Solutions for largE bAtteries for waterBorne transport)



LC-BAT-14-2020 - Self-healing functionalities for long lasting battery cell chemistries 
→ **BAT4EVER** (Next-generation lithium-ion batteries that can heal themselves)

### **ALBATROSS Project**





### ALBATROSS → <u>A</u>dvanced <u>L</u>ight-weight <u>BAT</u>te<u>R</u>y systems <u>O</u>ptimized for fast charging, <u>S</u>afety, and <u>S</u>econd-life applications

Leading the electric and hybrid-electric passenger vehicle market with innovative solutions

CO-CREATION FOR OPTIMIZED BATTERY SYSTEMS





21
INSTITUTIONS

10
DIFFERENT COUNTRIES

Modular

Lightweight

Increased range

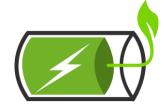
New generation thermal management systems

Fast charging

Cost-effective

Efficient and reliable battery systems





### Co-Creation for Advanced, Lightweight and Optimized Battery **Systems**

















Source: LC-BAT-10-2020











energy storage

INND Batteries B.V.









Norwegian University of Science and Technology











# **Support and Award Programmes**





Main goal of the Programme is to increase European Union Framework Programmes return rate and success of Turkey in it.



### **Networking**

Trust relations among Turkish and European research and innovation actors

#### **Participation**

Enable more new comers to access to consortia

### Quality

Increase the scientific, implementation, impact quality of proposals

### Leadership

More leading roles in research and innovation consortia

### **Encouragement**

Fairly award effort and success

### **Support and Award Programmes for EU FPs**

	Objective	Scope	Amount
Travel Support	Involvement in consortia	Plane tickets, accommodation and inner-city transportation, conference fee, visa expenses, departure fee, daily allowance	Max. 1.500€/Travel
ERC Principal Investigator	Improving the quality of ERC projects	Training for preparing and submitting project proposals, pre-evaluation service, interview rehearsal support	Max. 16.500€/Project
Marie-Curie Pre-evaluation	Improving the quality of Marie-Curie Individual Projects (IF, COFUND)	Improving the project proposal form	Max. 8.000€/Project
Coordinators Support	Increasing the number of coordinators in multi-partner projects and SME projects	Training for preparing and submitting project proposals, pre-evaluation service, project writing service, organization support, travel Support	Max. 33.000€/Project
Support for the Membership to the Networks	For inclusion in project proposals and encouragement of membership in networks that are effective in setting priorities	Entrance or membership fees for the relevant year.	Max. 15.000€/Network

transportation,

scores

expenses, departure fee

Plane tickets, accommodation and inner-city

All project partners with above-threshold

conference

fee,

visa

Max. 1.500€/Travel

20.000 TL/Project on average

Membership to the Networks that are effective in setting priorities

Travel Support for Researcher Living Abroad

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Promoting success and re-application,

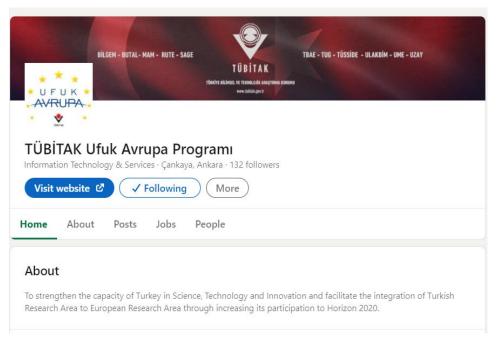
Increasing the budget share

Above-Threshold Se

**Award** 

## Horizon Europe: Social Media Accounts





https://www.linkedin.com/company/t%C3%BCbi%CC%87tak-ufuk-avrupa-program%C4%B1/



https://twitter.com/UfukAvrupa\_TR



### IPA II - "Turkey in Horizon 2020 - Phase II" Project





In order to support our ecosystem to achieve new successes, training activities, project evaluation services and the development of cooperation networks were provided.



### **International Brokerage Events and International Study Visits**





### **International Brokerage Events**



#### **International Study Visits**

Examples of International Brokerage Events:

ICT Turkey | İstanbul, 5 June 2019













Cities of the Future | Brussels, 8 November 2019



Examples for Study Visits

#### **Germany**

(28-30 Jan 2020)

Robotics, Smart Manufacturing Technologies Microelectronic



Deutsches Forschungszentrum für Künstliche Intelligenz

German Research Center for Artificial Intelligence







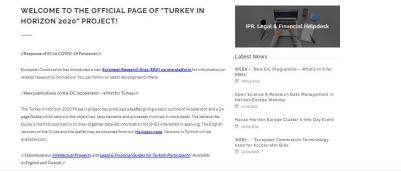
# **Communication Channels**







https://turkeyinh2020.eu/





TurkeyinH2020

@TurkeyinH2020 Seni takip ediyor

We are here to support Turkish public and private organisations, industry and SMEs to maximise their benefits from Horizon 2020, the EU programme for R&D. Kişisel bilgileri çevir

& turkeyinh2020.eu 🖽 Ocak 2016 tarihinde katıldı

65 Takip edilen 745 Takipci

İstanbul Okan Üniversitesi TTO, connectto ve takip ettiğin diğer 15 kişi tarafından takip

https://twitter.com/TurkeyinH2020

#### Turkey in Horizon 2020 (Phase II)

Supporting Turkish institutions and companies in their participation of Horizon 2020 and Horizon Europe R&D programmes.

Executive Office - Cankaya/Ankara, Ankara - 1,269 followers

Uygar & 2 other connections work here · 7 employees

https://www.linkedin.c om/company/turkey-inhorizon-2020/

### **Horizon Europe Info Days 2021**







https://www.horizon-europe-infodays2021.eu/

5-6.07.2021

## Horizon Europe Cluster 5 International Brokerage Event







7 July 2021

Horizon Europe Brokerage Event for Cluster 5

https://he-cluster5.b2match.io/



Profile:

Organisation Information:

**MARKETPLACE** 

# Participation of Associated Countries





- "At the date of the publication of the work programme, there are no countries associated to Horizon Europe."
- "For the purposes of the eligibility conditions, applicants established in Horizon 2020 Associated Countries or in other third countries negotiating association to Horizon Europe will be treated as entities established in an Associated Country, if the Horizon Europe association agreement with the third country concerned applies at the time of signature of the grant agreement."



### **Thanks**

### **EU Framework Programmes National Coordination Office**

ncpbatteries@tubitak.gov.tr

