People's Republic of China - Country Page

1. <u>Available local programs or funds that could provide support to Chinese entities participating in Horizon 2020</u>

Horizon 2020 is open to international participation in all fields and areas. Chinese researchers, enterprises, research institutions and universities can team up with European partners to participate in projects under Horizon 2020 and make best use of Europe's excellent opportunities in research and innovation.

> EU-China general Co-Funding Mechanism (from the ministry of Science and Technology - MOST)

The China-EU co-funding mechanism (CFM) on research and innovation cooperation has played a significant role in supporting win-win Science, Technology and Innovation (STI) cooperation since its launch in December 2015. Since then, the European Commission and MOST agreed to renew the CFM for the period 2018-2020 to support joint projects between European and Chinese universities, research institutions and companies.

Under the CFM, MOST has been providing financial support on a competitive basis to China-based entities that participate in joint projects with European partners under Horizon 2020. For the period 2018-2020, MOST intends to reserve an annual budget of up to 200 Million RMB, and the EC intends to reserve a budget of up to 100 Million Euro in Horizon 2020 calls targeting cooperation with China.

The CFM will be primarily used for EU-China Flagship initiatives and other Horizon 2020 topics targeting China (see below a list of currently open and future topics targeting China in Work Programme 2018-2020 of Horizon 2020) but it will also be open to other areas of Horizon 2020.

The exact terms and conditions of MOST CFM call are published by MOST in their website twice a year. On 23 April 2019, MOST published the first call for proposals for the year 2019 under the Intergovernmental International Science, Technology and Innovation (STI) Collaboration Key Project of China's National Key R&D Programme (NKP). With the deadline for submission of proposals set for 12 June 2019, this call includes two parts when seeking applications by China-based partners in Horizon 2020 Work Programme 2018 or 2019 proposals: 1) a first part containing joint topics under the food, agriculture and biotechnologies flagship initiative for which 2-3 projects are expected to be funded for a total budget of CNY40 million, and 2) a second part inviting proposals addressing nine broad areas for which around 20 projects are expected to be funded for a total budget of CNY60 million. Chinese applicants are encouraged to contact MOST to seek support for their participation in Horizon 2020.

Please find the details of the call at the MOST website:

http://www.most.gov.cn/mostinfo/xinxifenlei/fgzc/gfxwj/gfxwj2019/201904/t20190423_146203.htm

MOST:

Ms. Wang Yingshi, Email: wangys@most.cn or hzs.ozc@most.cn Tel. +86.10.58881357

China Science and Technology Exchange Centre (CSTEC)

Mr. Xin Bingqing E-mail: xinbq@cstec.org.cn Tel: +86.10. 68598010

Ms. Lin Xiyan Email: linxy@cstec.org.cn Tel: +86.10.68573441

Co-funding from the National Natural Science Foundation of China (NSFC)

NSFC will provide co-funding for the flagship initiative on biotechnology for the environment and human health. For

the three topics listed below NSFC has / will run calls in parallel with Horizon 2020 and provide funding to the selected Chinese projects and their Chinese partner organisations.

Environmental Biotechnology:

- i. New biotechnologies for environmental remediation (call 2018)
- ii. Microorganism communities for plastics biodegradation (call 2019)
- iii. New biotechnologies for remediation of harmful contaminants (call 2020)

On 3 January 2018, NSFC published its call for the first joint topic "New Biotechnologies for Environmental Remediation" with a deadline for submission of proposals on 12 April 2018. As a follow up, two projects, each with three interrelated sub-topics, were supported. The ceiling of fund scale per project does not exceed 15 million RMB (direct cost) to cover the cost of research and international cooperation and exchanges.

For further information please visit the NSFC call website:

http://www.nsfc.gov.cn/publish/portal0/tab434/info72596.htm

NSFC

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Ms. Shen Jie, Email: shenjie@nsfc.gov.cn, Tel: +86.10.62327017

Directorate-General for Research and Innovation (DG RTD) of the European Commission

Dr. Carmen.DE-VICENTE, Email: Carmen.DE-VICENTE-COLL@ec.europa.eu

Mr. John CLEUREN, Email: john.CLEUREN@ec.europa.eu

Co-funding from the Chinese Ministry of Industry and Information Technology (MIIT)

MIIT has been providing co-funding for the topic "LC-MG-1-6-2019: Aviation operations impact on climate change". On 17 January 2018, MIIT published the notice announcing the call for proposals on the following specific research topics. Proposals should be sent to MIIT Department of Equipment Manufacturing Industries during the period from 4 December 2018 to 24 April 2019. Chinese participants in joint projects under Horizon 2020 are expected to apply to MIIT for co-funding.

- 1. Safer and More Efficient Certification of Green Aviation Alternative Fuel (AAF)
- 2. 4D Trajectory Based Greener Air Traffic Operations

For further information please visit MIIT website: http://xxgk.miit.gov.cn/gdnps/wjfbContent.jsp?id=6017273

MIIT

Ms. Luo Jie, Email: luojie@miit.gov.cn; Tel: +86.10-68205645

Directorate-General for Research and Innovation (DG RTD) of the European Commission

Mr. Andrea GENTILI, Email: Andrea.GENTILI@ec.europa.eu

ERC-NSFC Implementing arrangement

At researchers' level, in order to promote the mobility of researchers between the EU and China, the European

Research Council (ERC) and the National Natural Science Foundation of China (NSFC) agreed on the Implementing Arrangement in June 2015 to stimulate excellence-based, bottom-up collaboration in frontier research by facilitating that high-calibre Chinese researchers come to Europe to join ERC-funded research teams. The scheme is targeted at the Chinese researchers who are active holders of the competitive grants of NSFC. Selected Chinese researchers will be incorporated in the research teams of the European Principal Investigators who are already supported through the ERC grants and who have expressed an interest in hosting Chinese researchers in their research teams. Potential Chinese participants are encouraged to contact NSFC to seek support for their participation in Horizon 2020:

NSFC:

Ms. Fan Yingjie, Email: fanyj@nsfc.gov.cn, Tel: +86.10.62325309

Ms. Shen Jie, Email: shenjie@nsfc.gov.cn, Tel: +86.10.62327017

European Research Council:

Ms. Samantha CHRISTEY, Email: Samantha.CHRISTEY@ec.europa.eu

2. <u>Flagship initiatives and priority areas for EU-China S&T cooperation</u>

In line with the priorities set in the roadmap for research and innovation cooperation with China, a number of joint R&I flagship initiatives were agreed by the European Commission and the Government of China for the period 2018-20 with co-funding from Horizon 2020 and from the Chinese government. The objective of the flagship initiatives is to promote more substantial, coordinated and balanced research and innovation cooperation in particular in the areas of Food, Agriculture and Bioeconomy, Surface Transport, Safer and Greener aviation, Biotechnologies for environment and human health, and sustainable urbanisation.

Food, Agriculture and Biotechnologies (FAB)

The EU China research and innovation flagship initiative on food, agriculture and biotechnologies (FAB) is a comprehensive research and innovation cooperation programme launched in 2014 to tackle sustainable agriculture, food security and safety in the EU and China. Common priorities and WP topics have been jointly identified and co-funded by the EC with CAAS and MOST. This has been translated so far into 12 Horizon WP 2020 topics dedicated to cooperation with China with a total EU budget of 94 million euro. As a result 15 joint projects have been launched involving 85 Chinese partner organisations.

For the third phase of the FAB Flagship (Work Programme 2018-20) a balanced EU-China cooperation is expected with emphasis on integrated approaches to food safety in agri-food chain, high-efficient management of soil quality and land resources, healthy soils for healthy food production, and use of biogas digestate for high-quality organic fertilisers, fertilisers and other topics with common interests when it is appropriate;

In addition to the two topics closed in 2018 and beginning 2019¹, two topics are / will be published as follows:

Topic Title (click topic name to follow link):	Deadline stage 1	Final Deadline
SFS-37-2019: Integrated approaches to food safety controls across the agri-food chain	23 Jan 2019	4 Sep 2019
SFS-40-2020 - Healthy soils for healthy food production	2020	2020

¹ SFS-38-2018: Highly efficient management of soil quality and land resources, closed on 11 Sep 2018, and CE-SFS-39-2019: High-quality organic fertilisers from biogas digestate

These topics are intended to promote balanced and substantial cooperation between European and Chinese partners. China based participants in projects selected under Horizon 2020 are invited to apply for co-funding from MOST.

> Environment and Sustainable Urbanisation

Strategic joint EU-China research and innovation cooperation in environment and sustainable urbanisation is a long standing priority for both regions and it has been pursued with a number of joint projects in FP7 and no less than 8 topics in Horizon 2020 so far. The most recent one, closed on 04 September 2018, referred to 'strengthening international cooperation on sustainable urbanisation: nature-based solutions for restoration and rehabilitation of urban ecosystems. a) Strengthening EU-China collaboration' (call SC5-13-2018-2019).

Surface Transport

Cooperation with China on Surface Transport built on past multilateral cooperation with CSA projects like "SOLUTIONS" launched in May 2013 supporting the uptake of innovative sustainable urban mobility solutions in Europe. Recent cooperation focused on transport impact on urban mobility, sustainable electrification, air quality, and freight transport systems, and were promoted through the following topic (closed) targeting China as well as other international partner countries. China-based participants in projects selected under Horizon 2020 were invited to apply for co-funding from MOST.

Topic Title (click topic name to follow link):	Deadline stage 1	Final Deadline
LC-MG-1-1-2018: InCo flagship on reduction of transport impact on air quality		19 Sep 2018
C) Sensing and monitoring emission in urban road transportation system (China)	31 Jan 2018	(closed)

Biotechnologies

Following fruitful cooperation on biomaterials under FP7 and further collaborations under Horizon 2020 through the 2018 and 2019 work programmes², the European Commission and the National Natural Science Foundation of China (NSFC) agreed to further promote their links in research and innovation with a new research topic on biotechnology for the environment involving co-funding from both sides.

Topic Title:	Deadline stage 1	Final Deadline
NMBP-21-2020: New biotechnologies for remediation of harmful contaminants	TBC	TBC

The call related to the topic mentioned above is also expected to promote substantial, coordinated and balanced cooperation between the EU and China. Separate parallel calls will be published by the European Commission under Horizon 2020 and by NSFC in China. China-based organisations are expected to apply for funding to NSFC.

Aviation

Building on a long standing cooperation on aviation research the European Commission and the Ministry of Industry and Information Technology agreed to promote further cooperation with a topic on Aviation operations impact on climate change. This topic closed on 24 April 2019 intended to promote balanced and substantial cooperation between EU and Chinese organisations. China-based participants in applications and projects selected under Horizon 2020 were invited to apply for co-funding from MIIT

Topic Title (click topic name to follow link):	Deadline stage 1	Final Deadline
LC-MG-1-6-2019: Aviation operations impact on climate change		25 Apr 2019
C) Propose and evaluate mitigation strategies towards greener flight		25 Apr 2019

² CE-BIOTEC-04-2018: New biotechnologies for environmental remediation, closed on 25 Apr 2018, and CE-BIOTEC-05-2019: Microorganism communities for plastics bio-degradation (RIA), closed on 5 March 2019

trajectories (ensuring complementarities with SESAR JU activities.	
(China)	
D) Propose and evaluate mitigation strategies based on changes in	
the use of alternative fuels (China)	

3. Other areas eligible for MOST Co-Funding Mechanism

Chinese participation is welcomed in the great majority of Horizon 2020 calls and topics in line with existing rules. In addition to the flagship initiatives, several Horizon 2020 topics are flagged for cooperation with China. MOST Co-funding mechanism can be used to promote a strong Chinese participation in these topics as well as in other topics linked to MOST priority areas outlined below. For exact eligibility conditions Chinese participants are encouraged to contact MOST (https://www.most.gov.cn/eng/).

MOST Priority areas:

- **1. New-generation information networks -** 5G communication technology, optical communication technology, CPU technology, Internet-of-things technology, virtual reality technology, quantum computing, big data technology
- 2. Intelligent and green manufacturing High-end numerical control machine and intelligent robotics, electric power equipment, next generation semi-conductor, additive manufacturing, new energy equipment, micro-nano manufacturing, gas turbine
- 3. Safe, clean and efficient modern energy Clean coal utilisation technology, marine wind power technology, smart grid technology, hydrogen fuel cell technology, nuclear energy utilisation and nuclear decommissioning technology
- **4 Advanced effective, safe and convenient health** Bio-pharmaceuticals, precision medicine, high performance medical devices, prevention and treatment of major infectious diseases, antibiotic resistance, regenerative medicine, medical big data, medical robots, aging services technology, traditional Chinese medicines
- 5. Marine equipment Marine engineering equipment and high tech ships, deep sea oil and gas, natural gas hydrate, deep sea operation
- **6. Space -** Space equipment, space science and technology, satellite application technology (small satellite and load technology), remote sensing (deep-space exploration, satellite imaging, atmospheric observation, lunar-based observation)
- **7. New materials -** Graphene technology, nanomaterials, high performance structure and composite materials, advanced semi-conductor materials, advanced light alloy materials, advanced functional and intelligent materials, catalytic materials
- 8. Large science facilities research
- 9. Public security Disaster warning and treatment, food and drug safety inspection

4. Horizon 2020 WP 2018-20 topics targeting the participation of China

Topic Title (click topic name to follow link):	Deadline stage 1	Final Deadline
Energy		
LC-SC3-NZE-5-2019-2020 Low carbon industrial production using CCUS		27 Aug 2019

5. Website of the Delegation of the EU to China and functional mailbox

Delegation of the European Union to China: https://eeas.europa.eu/delegations/china/15394/china-and-eu_en

Questions may be addressed to: Science & Technology Section at the EU Delegation in Beijing,

Email: Delegation-China-Scitech@eeas.europa.eu

6. List and availability of local National Contact Points

EU-China Science and Technology Cooperation Promotion Office (CECO): http://www.cstec.org.cn/ceco/en

Regional Contact Points: http://www.dragon-star.eu/wp-content/uploads/2014/06/China-RCP-Contact-May-2014.pdf