EU STI Programmes and International Mega-Programmes 欧盟科技创新计划及国际重大项目



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The EU – A Partner of Excellence in Research and Innovation 欧盟 – 优秀的科研创新合作伙伴



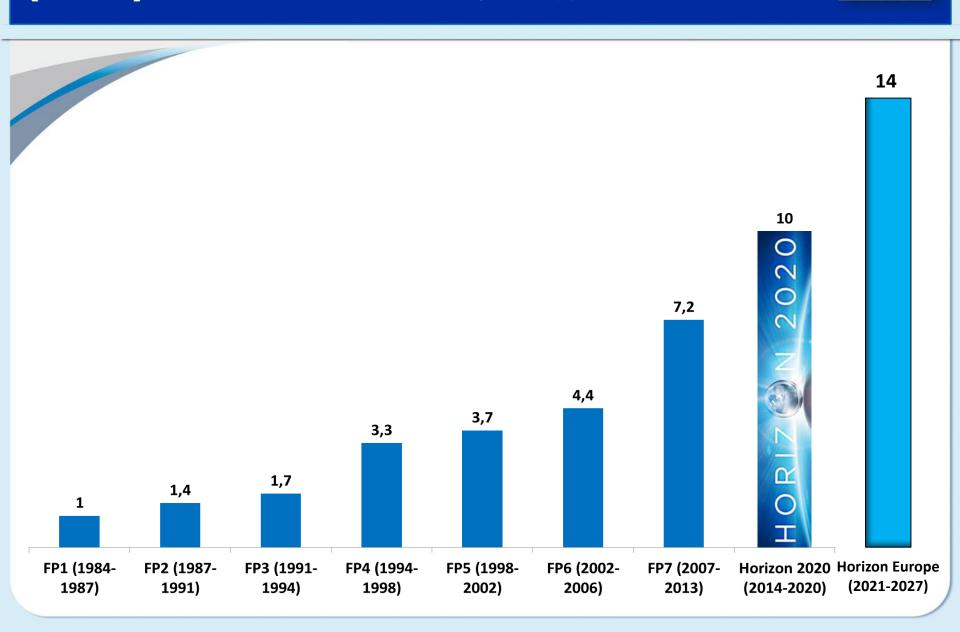
500 million people - 28 countries - a single market* 5亿人口 - 28个国家 - 单一市场



- 7% of the World's population世界人口比例
- 20.4% of world expenditure on R&D占世 界研发支出比例
- 32.1% of high-impact publications高影响力论文 比例
- 25% of patent applications专利申请比例

*Free movement of people, goods, services, capital and knowledge 人口、商品、服务、资本以及知识的自由流动

30 years of EU funded R&I Annual budget (in b€) 欧盟30年以来科研创新年度预算 (单位:10亿欧元)



What is Horizon 2020? 什么是地平线2020?



A €77 billion research and innovation funding programme (2014 -2020)

总预算770亿**欧元的科研**创新资助计划(2014-2020)

Coupling research with innovation: 'from lab to market'

连接科研与创新:"从实验室到市场"

Focus on societal challenges: health, clean energy, transport, etc.

关注社会挑战:健康、清洁能源、交通等等

Open to participation of companies, universities, institutes in EU and beyond

面向欧盟以及世界各地的公司、高校、研究院所 开放



Multilateral Cooperation 多边合作



28 Member-States (MS) 28个成员国

16 Countries Associated to the framework programme (AC) 16个框架计划协约国

Horizon 2020 = 44 Countries to collaborate with China on Research and Innovation 通过"地平线2020",可与44个国家开展科研创新合作



Horizon 2020: Three priorities 地平线2020: 三个优先任务



Mobility schemes: ERC,

Marie S. Curie

人才交流计划:欧洲研究理事

会、玛丽居里计划

ICT, nanoT, materials, biotech, manufacturing, space

信息技术、纳米技术、材料、生物技术、制造技术、太 空技术 1- Excellent science

卓越的科学

Health, Food, energy, Transport etc.

健康、食品、能源、交通等

2- Industrial leadership

产业引导

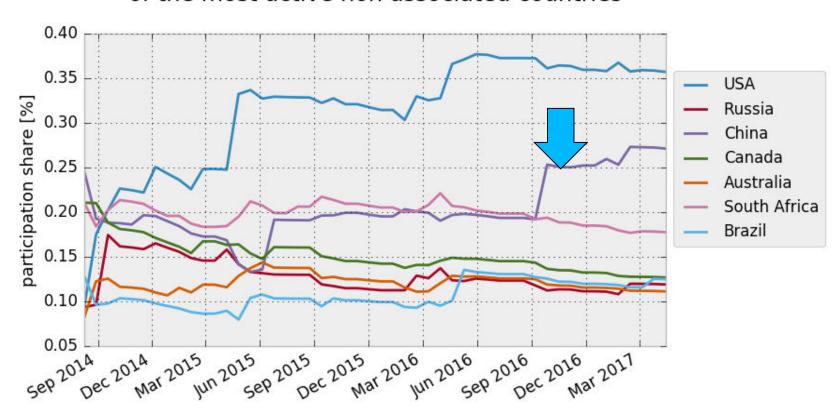
3- Societal challenges

社会挑战

Horizon 2020 – Evolution of participations 地平线2020 – 各国参与项目的发展趋势



Evolution of participations of the most active non associated countries



Note: Signed collaborative projects of Horizon 2020. Data for beneficiaries and third-parties.

Each line shows the cumulative share of participations of a country within all H2020.

Source: DG RTD - International Cooperation

Data: CORDA (JRC, EIT & art.185 not included); extraction date: 17/10/2017

Mission Innovation: Multilateral Clean Energy R&D Initiative

创新使命:多边清洁能源研发计划





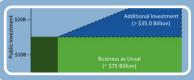
Launched at Paris COP 21 in 2015

启动于2015年举行的巴黎气候会议



22 countries (including China) and the EU

22个成员国(包括中国)及欧盟



Members have committed to doubling their governments' clean energy research and development (R&D) investments over five years 各成员承诺5年内政府清洁能源研发投资翻倍



Encourages greater levels of private sector investment in transformative clean energy technologies

鼓励私人资本对清洁能源转型技术的投资



7 Innovation Challenges, including one on sustainable biofuels, coled by China, Brazil, Canada and India

, 7项创新挑战,其中包括由中国、巴西、加拿大和印度共同引领的可持续生物燃料



Second MI Ministerial in Beijing in June 2017, MI-3 Ministerial in May 2018 in Sweden, co-hosted by the EU 第二次创新使命部长级会议于2017年6月在北京举行;第三次创新使命部长级会议于2018年5月在瑞典举行,由欧盟共同主办

Multilateral health research activities

健康领域多边科研计划





www.irdirc.org









http://intbir.nih.gov/





Global Research Collaboration for Infectious Disease Preparedness

http://www.glopid-r.org/



HUMAN FRONTIER SCIENCE PROGRAM

FUNDING FRONTIER RESEARCH INTO COMPLEX BIOLOGICAL SYSTEMS
Supported by

http://www.hfsp.org/



国际动物健康研究联合会



Objective: to coordinate research at international level to contribute to new and improved animal health strategies for >30 priority diseases/issues

目标:协调国际层面的科研活动,改进针对30余项疾病/问题的动物健康战略

Partnership: 25 members from 16 countries + 1 international research organisation +

EC + 1 Charity +1 industry +2 industry organisations

项目伙伴:来自16个国家+1个国际研究组织+欧洲委员会+1个慈善机构+1个企业+2个产业组

织的25个成员

Key features: Common objectives, based on identified priorities; Focus on research outputs; Distribution/alignment of research activities, with funding usually according to funders own procedures; Sharing of information/results

主要特点:基于优先课题确立的共同目标;关注研究产出成果;根据各自程序布局/对接科

研活动;分享信息/成果

Deliverables: Candidate vaccines, Diagnostics, Therapeutics, Key scientific information/tools to support risk analysis and disease control

成果: 候选疫苗, 诊断, 疗法, 支持风险分析和疾病控制的关键科研信息/工具

http://www.star-idaz.net/

International Bioeconomy Forum (IBF)

国际生物经济论坛



- Objective: to provide a flexible multilateral mechanism where global partners can discuss and act on common bioeconomy-related thematic challenges (STI, policy alignment).
- <u>目标</u>:为**全球合作伙伴提供灵活的多**边机制, 围绕**共同的生物**经济挑战,**开展**讨论**并采取行** 动(**科技**创新、政策对接)
- IBF launched in November 2017 and co-chaired by EC & Canada
- 启动于2017年11月,由欧洲委员会与加拿大 共同主持
- WGs have been set up (e.g. microbiome, ICT in Precision Food Systems)
- 成立了工作组(如微生物群,精密食物系统的信息通讯技术)
- Next IBF Plenary will be hosted by Canada in Spring 2019
- 下一届论坛大会将于2019年春由加拿大主办





Horizon Europe: 地平线欧洲 investing in R&I to shape our future 投资科研创新,塑造未来



The vision: 愿景

" a Europe that protects, a Europe that empowers, a Europe that defends" Jean-Claude Juncker 容克: 一个拥有保护能力、实力和防卫力量的欧洲

- Tackling climate change
 (35 % budgetary target)
 应对气候变化 (预算目标35%)
- Helping to achieve Sustainable
 Development Goals
 协助实现可持续发展目标
- Boosting the Union's competitiveness and growth
 增强欧盟竞争力、促进发展





Credits: https://www.un.org/s

Horizon Europe: Evolution not Revolution

地平线欧洲:演进,而非革命



Pillar 1 Open Science 开放科学

European Research Council 欧洲研究理事会

Marie Skłodowska-Curie Actions 玛丽居里行动计划

> Research Infrastructures 科研基础设施



Pillar 2 Global Challenges and Industrial Competitiveness 全球性挑战及产业竞争力

- Health 健康
- Inclusive and Secure Society
- 包容与安全社会
- Digital and Industry 数字化产业
- Digital and Industry 数字化产 Climate, Energy and Mobility 气候、能源与交通
 - Food and natural resources 食 品与自然资源

Joint Research Centre 联合研究中心



Pillar 3 Open Innovation 开放创新

European Innovation Council 欧洲创新理事会

European innovation ecosystems 欧洲创新生态台系统

European Institute of Innovation and Technology 欧洲创新技术研究院

Strengthening the European Research Area 加强欧洲科研区域建设

Sharing excellence 分享卓越研究

Reforming and Enhancing the European R&I system 改革并扩展欧洲科研创新体系



R&I Missions 科研创新任务



R&I Missions 科研创新任务 **Connecting to citizens:** Missions will relate EU's research and innovation to society and citizens' needs, with strong visibility and impact 联系公民:建立欧盟科研创新与社会和公民需求之间的联系,

增加可见度和影响力

A mission will consist of a portfolio of actions intended to achieve a **bold and inspirational as well as measurable goal** within a set timeframe, with impact for science and technology, society and citizens that goes beyond individual actions

任务包含一系列行动,在设定的时间范围内实现**大胆、鼓舞人心而可测量的目标**,为科技、 **社会和公民**带来影响

Horizon Europe proposal defines mission characteristics and criteria "地平线欧洲"提案确立了任务的特点和标准



Further Information

详情请登陆下列网站



EU Delegation Website 欧盟驻华代表团

https://eeas.europa.eu/delegations/china_en_

Horizon 2020 website 地平线2020网站

http://ec.europa.eu/programmes/horizon2020/en

Participant Portal 参与申请人员门户网站

http://ec.europa.eu/research/participants/portal/desktop/en/home......



Scan the WeChat QR code to #ExperienceEurope 扫描二维码,开启你的#纵情欧洲#之旅!



Horizon2020 China Country Page "地平线2020"中国网页

http://ec.europa.eu/research/participants/data/ref/h2020/other/hi/h2020 localsupp china en. pdf

Euraxess China 中欧科研人员网络

http://china.euraxess.org

Ministry of Science and Technology 科学技术部

http://www.most.gov.cn/index.htm

China Science and Technology Exchange Centre 中国科学技术交流中心

http://www.cstec.org.cn/zh/index.aspx

EU-China Research and Innovation Cooperation 中欧科研创新合作

http://ec.europa.eu/research/iscp/index.cfm?pg=china

National Science and Technology Information System 国家科技管理信息系统公共服务平台 http://service.most.gov.cn/





Thank you for your attention! 感谢您的关注!

> Research and Innovation