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The EU Framework Programme for Research and Innovation

HORIZON 2020

Research on alcohol related harm

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Research on alcohol related harm

- **Sixth** framework programme (2002-06)
Alcohol prevention, neurobiology, addiction, road safety (EUR 30 million)
- **Seventh** framework programme (2007-13)
Neurobiology, addiction behaviour, public health measures to reduce alcohol related harm
(EUR 59 Million)
- **H2020** (2014-20) Challenge based approach
Wide range of issues e g prevention of addiction and the effects of alcohol consumption. Examples of themes in current projects: environment and genetic causes, social determinants, brain sites and functional networks, training primary care practitioners

Examples of research projects on alcohol (FP7)

- **AAA-PREVENT (FP7)** - Alcohol use Among Adolescents in Europe, Environmental Research and Preventive Actions. Studied push and pull effects of a variety of risk and protective factors.
- **ADDICTION (FP7)** Focus on interplay between genetic and environmental causes of individual variation in substance use and the risk for abuse. Twin studies demonstrated that both heritable and environmental factors play a role.
- **ALICE-RAP (FP7)** better understand the determinants of addiction and dependence including a specific focus on youth. It studies the impacts of new technologies on use, the interrelations of culture and biology, and features that promote resilience and reduce problematic use.
- **AMPHORA (FP7)** impact of public health measures and interventions, thereby providing better guidance for integrated policy-making aimed at reducing the harm done by alcohol.



Examples of research projects on alcohol H2020

- **BEAMED (H2020)**

Adequate diagnosis of drug and alcohol addiction and treatment by general practitioners fails, in part due to a lack of knowledge and accredited training in addiction medicine. The goal of this project is to establish the feasibility and acceptability of training primary care practitioners in addiction medicine

- **GALAXY** aims to develop novel systems medicine tools which integrate clinical, multi-omics and lifestyle information from alcohol over-users . Interventions to restore a healthy gut microbiome will aim to reduce disease development, identify at-risk individuals in time and to develop personalised healthcare strategies for alcohol over-users (20% of the EU population >15 years old)

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- **SYBIL-AA** Rational strategies for design and development of novel, evidence based therapies for alcohol addiction are still missing. The project will use a novel discovery strategy based on systems biology concepts that uses mathematical and network theoretical models to identify brain sites and functional networks that can be targeted specifically by therapeutic interventions

ERC grants related to alcohol

- **Self-Control** Towards novel training regimes (including freely distributed app) enhancing inhibition and impulse control in health and psychiatric disease
- **CCT** The psychology and neurobiology of cognitive control training in humans. Results could show its suitability in addiction therapy and behaviour change
- Non-alcoholic fatty liver disease, several projects (EPIRIN, HEPASPHER, EXNADMINA)

H2020 health work programme 2018-20

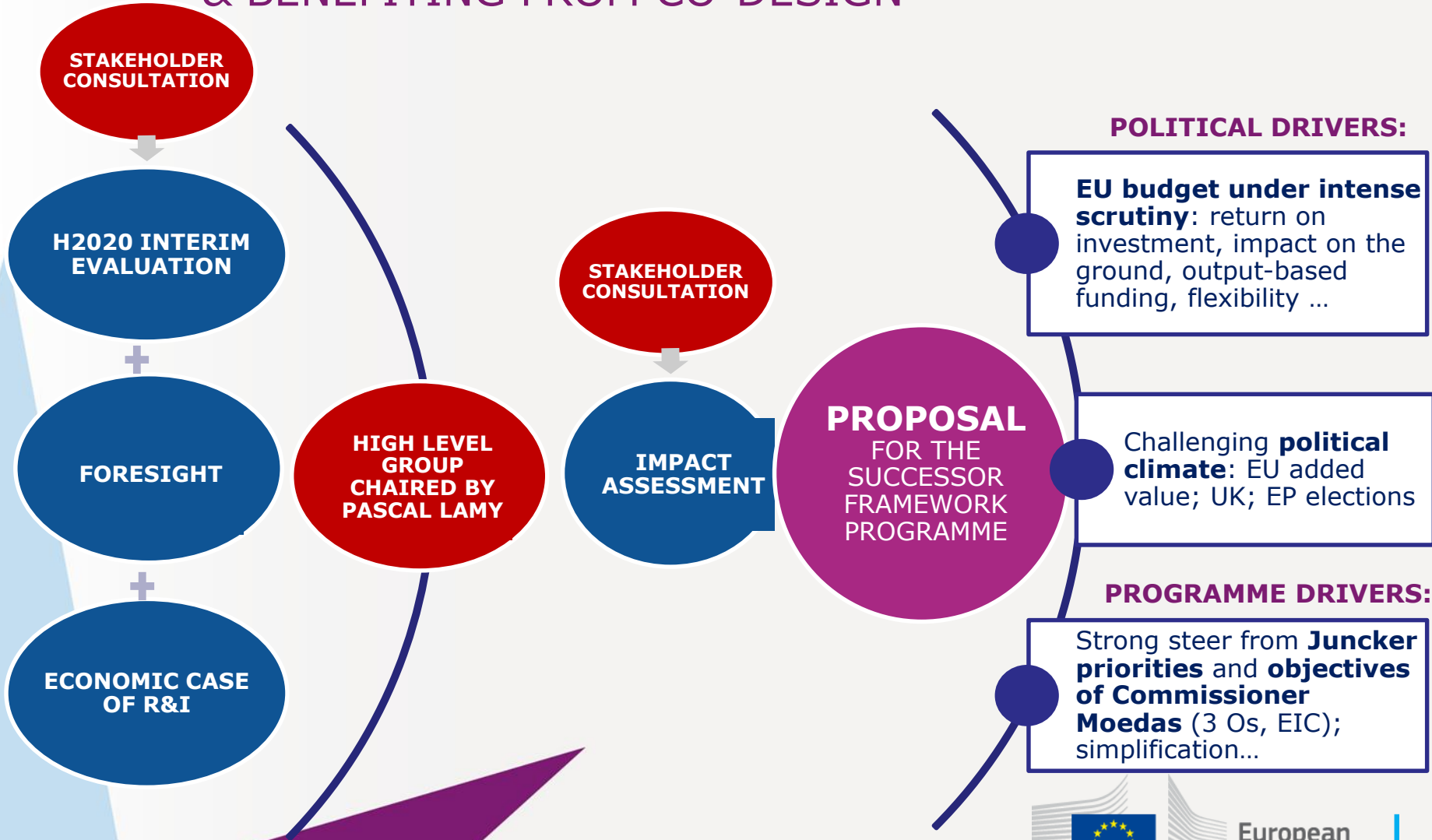
- **Five priority areas:**
 - **Personalised medicine**
 - **Innovative health and care industry**
 - **Infectious disease and improving global health**
 - **Innovative health and care systems, integration of care**
 - **Decoding the role of the environment incl climate, for health and wellbeing**
 - **Digital transformation in health and care**

Topic examples 2018-20

- Understanding causative mechanisms in co- and multimorbidities
- Exploiting research outcomes and application potential of the human microbiome for personalised prediction, prevention and treatment of disease
- Mental health in the workplace
- The Human Exposome Project; a toolbox for assessing and addressing the impact of environment on health
- Adaptive smart working and living environments supporting active and healthy ageing



TOWARDS FP9: LEARNING FROM THE PAST, CONSIDERING THE FUTURE & BENEFITING FROM CO-DESIGN





TOWARDS FP9: Key findings from the H2020 INTERIM EVALUATION

EFFICIENCY



ON TRACK TO BE MORE EFFICIENT THAN FP7

- Administrative expenditure below the 5% legal target
- Time-to-grant 110 days faster than FP7



NETWORKS A WIDE RANGE OF STAKEHOLDERS

- Participants from over 130 countries
- 52% of participants are **newcomers**; more of them come from EU-13 (31.2%) than EU-15 (19.7%)



LARGE-SCALE OVERSUBSCRIPTION

- Success rate only 11.6% (vs. 18.4% in FP7)
- ~EUR 1.7 billion spent to write unsuccessful proposals



TOWARDS FP9: Key findings from the H2020 INTERIM EVALUATION

EFFECTIVENESS - ECONOMIC IMPACT

PRODUCING INNOVATIONS & COMPETITIVENESS



- More **private sector participations** (33.2%) than FP7
- Funded projects ~40% more likely to be granted patents; patents are of **higher commercial value** than other peers
- 70% of SMEs aim at **new-to-market innovations**



GENERATING JOBS, GROWTH & INVESTMENTS

- **Every euro invested** under Horizon 2020 **brings** an estimated GDP increase of **6 to 8.5 euros** (EUR 400 to EUR 600 billion by 2030)

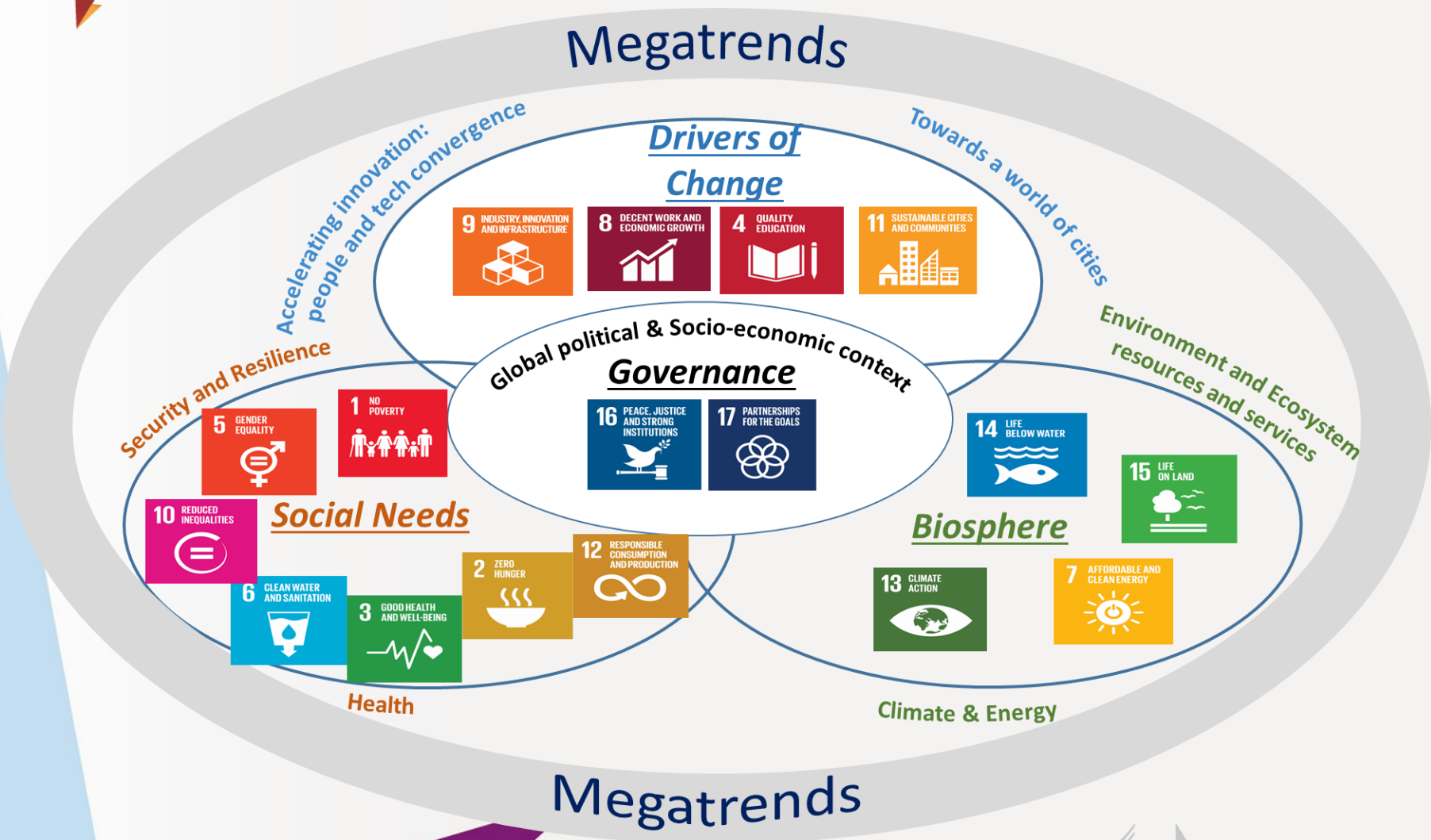


SUPPORTING & NETWORKING BUSINESS & SMEs

- 5,700 organisations funded under Access to Risk Finance
- EUR 13 billion **private funds leveraged**



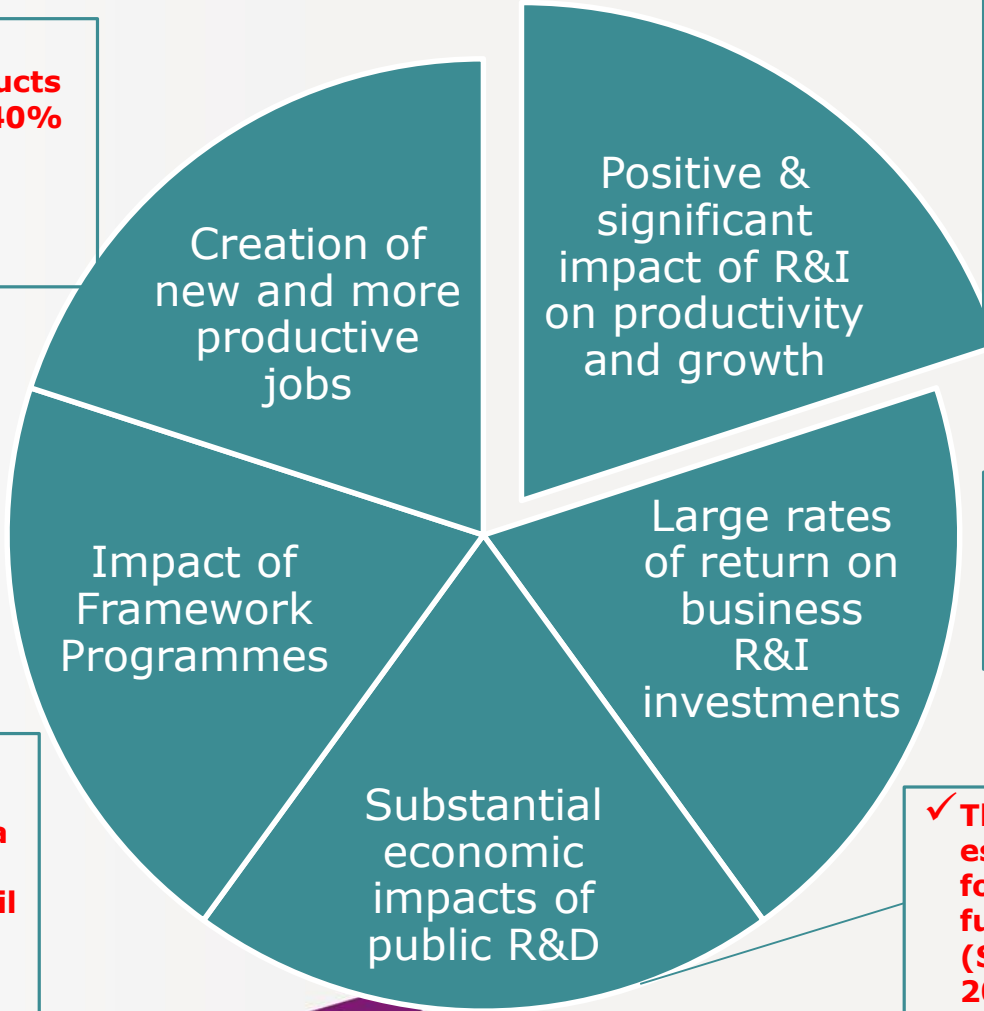
TOWARDS FP9: FORESIGHT - THE BOHEMIA SCENARIOS





TOWARDS FP9: THE ECONOMIC CASE OF R&I

✓ Companies with innovative products generate 30%-40% of new jobs in manufacturing (Harrison et al 2014)



✓ 62% of growth in Europe from 1995 to 2007 derives from R&I (NESTA, 2013)

✓ An increase in R&D investment of 0.2% of GDP can lead to an increase of 1.1% of GDP, i.e. five-fold in absolute terms (Donselaar and Koopmans, 2016)

✓ On average, the net benefits for a company that invests 100 € in R&D are 20 €, and up to 54 € for R&D intensive companies (Hall et al, 2010)

✓ The rate of return to public R&D is estimated to be around 20%, i.e. for every 100 € of public R&D funding, the net benefit is of 20 € (Sveikaucas 2012, Haskel et al. 2014, Georghiou 2015)



TOWARDS FP9 POLICY PRIORITIES SET BY COMMISSIONER MOEDAS

Open Science

- ✓ Open Access
- ✓ Open **Data and** European Open Science Cloud
- ✓ Research Integrity
- ✓ Inlusiveness & Citizen Science



Open Innovation

- ✓ European Innovation Council
- ✓ **Venture capital funds of funds**
- ✓ **Pro innovation** Regulatory Environment
- ✓ Boosting Private Investment
- ✓ Maximizing Impact of EU funding

Open to the World

- ✓ Leading & working with multilateral initiatives & international organisations
- ✓ **Better** framework conditions for **scientific** cooperation
- ✓ **Science diplomacy and synergies with the EU's external policies**



TOWARDS FP9 INDICATIVE TIMELINE

2017	
Jan	Public stakeholder consultation for the interim evaluation (with some forward looking questions) closed on 15 January
May	Publication of the Staff Working Document on the Interim Evaluation (evaluation results based on legal base requirements & 5 mandatory evaluation criteria)
June	<ul style="list-style-type: none">• Assessment of Horizon 2020 implementation in view of its interim evaluation and the Framework Programme 9 proposal by the European Parliament (EP);• ERAC Opinion on the interim evaluation of H2020 and in view of the preparations of the next FP
July	<ul style="list-style-type: none">• Publication of High Level Group report and stakeholder conference on Horizon 2020 Interim Evaluation (3 July)• Informal Competitiveness Council, Tallinn
Q4	<ul style="list-style-type: none">• H2020 Work Programme 2018-2020 integrating main findings from the Interim Evaluation• Publication of Commission Communication:<ul style="list-style-type: none">• Overall conclusions on the evaluation results;• State of implementation of the FP7 ex-post HLEG recommendations;• Response to High Level Group recommendations;• Messages on Art. 185 and Art. 187 initiatives
2018	
Mid	Next MFF Commission proposal
	Commission proposal tabled for the next Framework Programme & accompanying Impact Assessment
2019	
	European Parliament elections, appointment of the new Commission
2021	
	Launch of the 9th Framework Programme



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