

EFSI Operation Scoreboard¹

PROJECT PRESENTATION	
<u>Project name</u>	ANTIVIRAL VACCINE RDI (COVID-19)
<u>Promoter and financial intermediary</u>	BIONTECH SE
<u>Country of implementation</u>	Germany
<u>Summary project description</u>	<p>On 30th January 2020, the World Health Organisation declared the novel coronavirus (2019-nCoV) outbreak a public health emergency of international concern. In this context, a well-needed vaccine should be developed and approved in a timely manner. Competent Authorities globally have recognised the unprecedented need to streamline processes and data requirements.</p> <p>The project supports BioNTech, a biopharmaceutical company that develops therapies based on messenger RNA, in its efforts to develop a prophylactic vaccine against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes COVID-19. The mRNA technology is a novel approach to vaccines, which allows a faster and easier scale up of capacities versus conventional vaccine technologies but has never been successfully used in a licensed vaccine before. The project concerns R&D activities for the development of the vaccine as well as the investment in the vaccine manufacturing facilities on a large commercial scale.</p> <p>BioNTech became the first European player and the fourth worldwide to start clinical trials with Phase I testing already underway in Germany. The vaccines are being tested in a fashion designed to accelerate the attainment of the necessary safety and efficacy data allowing market approval for the best (safest and most protective) vaccine - subject to conclusive clinical trials - potentially in 2021 or earlier, if conditional approval is granted.</p>

¹ This Scoreboard of indicators reflects the information presented to the EFSI Investment Committee (IC) for its decision on the use of the EU guarantee for this operation. Therefore, the document does not take into account possible developments that could have occurred after this decision.

Parts of this document that fall under the exceptions for disclosure defined by the EIB Group Transparency Policy, notably under articles 5.5 (protection of commercial interests) and 5.6 (protection of the Bank's internal decision-making process), have been replaced by the symbol [...].

PROJECT PILLAR ASSESSMENT

Pillar 1

Contribution to EU policy	Significant
EFSI	
Contribution to EFSI	100.00%
EFSI: Research, development and innovation	100.00%
Projects that are in line with Horizon 2020	100.00%

Pillar 2

Quality and soundness of the project	Excellent
1. Growth	[...]
2. Promoter capabilities	[...]
3. Sustainability	[...]
4. Employment	[...]

This pillar evaluates the quality and soundness of the operation. This pillar is composed of up to four indicators, as relevant, among which:

- (i) "Growth" i.e. for example and where relevant the economic rate of return ('ERR'), which considers the project's socioeconomic costs and benefits, including its spillover effects;
- (ii) "Promoter capabilities" i.e. the capacity of the promoter/intermediary to implement the project and create the expected impact at the [final] beneficiary level;
- (iii) "Sustainability" i.e. environmental and social sustainability²;
- (iv) "Employment" i.e. the project's direct employment effect;
- (v) "Increasing access to finance and improving financing conditions including for final beneficiaries".

Pillar 3

EIB Technical and financial contribution to the project	Significant
1. Financial contribution	[...]
2. Financial facilitation	[...]
3. Advice	[...]

This pillar measures the EIB's particular contribution to the project and its financing scheme in the form of financial and non-financial benefits which go beyond what commercial players would normally be able to offer. This dimension of value added is assessed through up to three indicators:

- (i) "Financial Contribution" i.e. improving the counterpart's funding terms compared to market sources of finance (interest rate reduction and/or longer lending tenor);
- (ii) "Financial Facilitation" i.e. helping to attract private financiers (for example through positive signaling effects), promoting synergies in co-financing with other public sources of funds including National Promotional Banks or EU financial instruments;
- (iii) "Technical Contribution and Advice" i.e. providing advice with a view to optimizing the financing package (financial structuring), or technical advisory services in the form of expert input / knowledge transfer - provided in-house by the EIB or in the form of assignments to external consultants - to facilitate the preparation or implementation of a project.

² For additional information on the EIB's assessment of the project's environmental and social aspects, please refer to the project's Environmental and Social Data Sheet (ESDS) published on the EIB website.

Pillar 4 - Complementary indicators

Additionality

In line with the EFSI objective of supporting research, development and innovation (RDI), in particular projects that are in line with Horizon 2020, the operation will support the development of a prophylactic vaccine against the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus causing the COVID-19 disease. The investment plan includes both R&D and related expenses to finance the development of the product via the Promoter's therapeutic mRNA platform, as well as investment in large-scale commercial vaccine manufacturing facilities. If successful, the operation will contribute towards the development of a safe and protective vaccine against COVID-19 and its production on the scale necessary to make the vaccine available globally. Considering the significant human, social and economic costs associated with the COVID-19 pandemic, a vaccine protecting against the disease would provide significant impact and benefits. Finally, the operation will also support the European supply chain for vaccines and if successful will provide a technology platform that could be leveraged in future pandemic scenarios.

The project will contribute to the financing of smaller innovative and/or high-growth companies, which generate significant positive externalities through the creation of innovative processes, products or services or through skill development and upgrading. This project addresses the market failure in R&D, specifically for highly risky vaccine candidates, which are typically not supported by the financial markets. Substantial funding is rapidly needed in connection with the operation and debt financing is not yet available in the required scope and with the necessary tenor, leading to a sub-optimal investment situation.

The operation is an equity-type investment and as such falls under the EIB Special Activities category. This is in particular due to the large size of the investments required, the R&D intensive nature of the operation as well as the inherent riskiness involved in the development of a vaccine candidate whose probability of technological and regulatory success is low. The EIB would not be able to provide this type of financing support during the period in which the EU guarantee could be used, or not to the same extent, without EFSI.

It is to be expected that the EIB support for this project will give a positive signal to the markets and the Promoter would be in a stronger position while raising additional capital (to the extent needed) for this high-impact project. Moreover, by supporting the investments into early-stage, high-risk operations, the Bank will trigger the attention of other financing institutions/organisations to the underserved vaccine development market gaps.

The operation will be supported by a credit enhancement from a first loss piece delivered under the InnovFin Corporate Risk Sharing Equity product. InnovFin is the EU financial instrument supported by the EU budget under the Horizon 2020 programme and is deployed by the EIB Group.

Set of indicators related to the macroeconomic environment

Germany - Economic environment

Economic Performance

	DE 2018	EU 2018	US 2018	DE 2001-2007
GDP per capita (EUR, PPS)	37,956.14	30,935.11	43,569.11	33,490.42
GDP growth (%)	1.43	1.97	2.86	1.40
Potential GDP growth (%)	1.63	1.60	2.24	1.32
Output gap (% of potential GDP)	0.69	0.62	0.74	-0.17
Unemployment Rate (%)	3.30	6.60	3.90	9.43
Unemployment Rate (%) - Y/Y change (% points)	-0.30	-0.60	-0.20	0.06
Bank-interest rates to non-financial corporations (%)	1.02	1.26	--	4.11
Bank-interest rates to non-financial corporations (%) - Y/Y change (% points)	-0.13	-0.06	--	-0.04
Investment rate (GFCF as % of GDP) - Total	20.77	20.54	20.84	19.91
Investment rate (GFCF as % of GDP) - Public	2.33	2.86	3.31	2.05
Investment rate (GFCF as % of GDP) - Private	18.44	17.68	17.53	17.87

General Sector Indicators

	2014	2015	2016	2017	EU (latest available)
Value added in Scientific research and development (% of total VA)	0.79	0.84	0.81	--	0.80
Employment in Scientific research and development (% of total employment)	0.47	0.47	0.48	--	0.55

Research, development and innovation

	2014	2015	2016	2017	EU (latest available)
Gross domestic expenditure on R&D (GERD) (% of GDP)	2.87	2.91	2.92	3.02	2.06
Gross domestic expenditure on R&D (GERD) distance to EU 2020 target (% of GDP)	0.13	0.09	0.08	-0.02	0.94
Research and development expenditure - Government (% of GDP)	0.42	0.41	0.40	0.41	0.23
Research and development expenditure - Higher education (% of GDP)	0.51	0.50	0.53	0.52	0.45
Research and development expenditure - Business (% of GDP)	1.94	2.00	1.99	2.09	1.36
Research and development expenditure - Private non-profit sector (% of GDP)	--	--	--	--	0.02
Eco-innovation index (EU =100)	135.00	132.00	135.00	139.00	100.00

- Country average for "GDP per capita (EUR, PPS)" is calculated in real terms

- EU value for "Bank-interest rates to non-financial cooperations" corresponds to Euro Area average; Country average is the simple average between 2003 and 2007

- The EU value is displayed as the value in the year that corresponds to the latest value of the indicator in a particular country

Other indicators³

Key project characteristics	Expected value at PCR
Start of works	01.05.2020
End of works	29.12.2023
Project investment cost [MEUR]	300.00 MEUR
EIB/EFSI eligible investment mobilised [MEUR]	270.00 MEUR
External EFSI multiplier	2.70
External EIB (non-EFSI) multiplier	
Amount of private financing [MEUR]	200.00 MEUR
Quick start (% of expenditure during 2015-2018) [%]	
Co-financing with national promotional banks [MEUR]	0.00 MEUR
Co-financing with structural funds (ESIF) [MEUR]	0.00 MEUR
Co-financing with other EU instruments (i.e. Horizon 2020, Connecting Europe Facility, etc) [MEUR]	0.00 MEUR
Energy efficiencies realised [MWh/a]	
Climate Action indicator	
Employment during construction - temporary jobs [person years]	700 person years
Employment during operation - new permanent jobs [FTE]	250 FTE

³ For additional information on the EIB's assessment of the project's environmental and social aspects, please refer to the project's Environmental and Social Data Sheet (ESDS) published on the EIB website. The abbreviation PCR stands for Project Completion Report. If applicable, a difference between the amount of Project investment costs and EIB/EFSI eligible investment mobilized might derive from the fluctuation of the underlying exchange rate.