

STRATEGY TO SUPPORT SMALL AND MEDIUM-SIZED ENTERPRISES IN THE CZECH REPUBLIC

2021–2027



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Ministry of Industry and Trade
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ACRONYMS USED

AI	Artificial Intelligence
ASMEC CR	Association of Small and Medium-Sized Enterprises and Crafts of the Czech Republic
B2B	Business-to-Business
B2G	Business-to-Government
BERD	Business enterprise expenditure on R&D
CBA	Czech Banking Association
CBAA	Czech Business Angel Association
CCC	Czech Chamber of Commerce
CNG	Compressed Natural Gas
COFUND	Co-Funding of regional, national and international programmes
CO ₂	Carbon Dioxide
CEB	Czech Export Bank
CMCTU	Czech-Moravian Confederation of Trade Unions
CMGDB	Czech-Moravian Guarantee and Development Bank
CR	Czech Republic
CTU	Czech Technical University
DLT	Distributed Ledger Technology
EBP	European Blockchain Partnership
EBSI	European Blockchain Services Infrastructure
EIC	European Innovation Council
EIF	European Investment Fund
ERDF	European Regional Development Fund
Commission	European Commission
EU	European Union
EU ETS	EU Emissions Trading System
EP	European Parliament

EGIC	Export Guarantee and Insurance Corporation
EUR	Euro
JTF	Just Transition Fund
GVC	Global Value Chain
GDP	Gross Domestic Product
GVA	Gross Value Added
GNP	Gross National Product
HPC	High-Performance Computing
I4.0	Industry 4.0
ICT	Information and Communication Technologies
IT	Information Technologies
IoT	Internet of Things
SDG	Single Digital Gateway
PSC	Point of Single Contact
KET	Key Enabling Technologies
OPCR	Office of the President of the Czech Republic
CEEU CR	Confederation of Employers' and Entrepreneurs' Unions of the Czech Republic
LE	Large Enterprises
LNG	Liquefied Natural Gas
MT	Ministry of Transport
MF	Ministry of Finance
MRD	Ministry of Regional Development
MIT	Ministry of Industry and Trade
MLSA	Ministry of Labour and Social Affairs
SMEs	Small and Medium-Sized Enterprises
MJ	Ministry of Justice

MEYS	Ministry of Education, Youth and Sports
MI	Ministry of the Interior
MFA	Ministry of Foreign Affairs
MoE	Ministry of the Environment
OECD	Organisation for Economic Co-operation and Development
OP EIC	Operational Programme Enterprise and Innovations for Competitiveness
OP TAC	Operational Programme Technology and Applications for Competitiveness
SEP	Self-Employed Person
RES	Renewable Energy Sources
PR	Public Relations
RIA	Regulatory Impact Assessment
RIS3	Research and Innovation Strategy for Smart Specialisation
RRF	Recovery and Resilience Facility
FEP	Framework Education Programmes
SMET	Single Market Enforcement Task-Force
TTA CR	Trade and Tourism Association of the Czech Republic
CI CR	Confederation of Industry of the Czech Republic
s.r.o.	Společnost s ručením omezeným (a limited liability company)
STEM	Science, Technology, Engineering and Mathematics
TA CR	Technology Agency of the Czech Republic
TC CAS	Technology Centre of the Czech Academy of Sciences
IPO	Industrial Property Office
OG CR	Office of the Government of the Czech Republic
R&D	Research and Development

R&D&I	Research, Development and Innovation
UT	University of Technology
WTO	World Trade Organisation
FO	Foreign Offices

INTRODUCTION

Since the transition to a market economy, small and medium-sized enterprises¹ have played a crucial role in terms of the growth of the Czech economy, job creation and innovation. In addition to the macroeconomic perspective, SMEs are of considerable economic as well as cultural and social importance at the regional level. They help to shape the environment at the local level, contribute to building community cohesion and fostering interpersonal relationships, as their owners often live in the place where their businesses operate. At the same time, however, they are extremely sensitive to economic fluctuations, they often experience difficulties that threaten their existence and many wind up, especially in the first years of their existence. In addition, while larger companies can afford to invest more in innovation and in systematically increasing added value, SMEs often find it more difficult to invest and, in turn, face challenges in terms of improving their productivity. This makes support for SMEs extremely important – it is a strategic priority not only of the Czech Republic but also of the European Commission, as SMEs are crucial for the twin transition to a sustainable and digital economy.

In an effort to consolidate and optimise SME support policy and tools in 2021–2027, the Ministry of Industry and Trade decided to assess the adequateness of the current setting, which is based on the SME Support Strategy 2014–2020, and to evaluate the overall position of SMEs in the

¹ In the context of this strategy, these are all enterprises that meet the conditions in the definition set out in *Commission Recommendation 2003/361/EC of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises*.

Czech Republic through implementing a detailed analysis assessing the SME policy mix², which was prepared by the World Bank³ in cooperation with the MIT and the Commission. Based on the identified needs of SMEs, recommendations were formulated focusing mainly on strengthening their productivity. Preparing the analysis thus represented the first step in setting the basic priorities, which were then further developed and detailed (while taking account of other key documents) by MIT in cooperation with relevant ministries, institutions and agencies in the present Strategy to Support SMEs in the Czech Republic 2021–2027. As part of the process, situation sub-analyses were carried out in key areas to determine the current situation and trends in those areas – the sub-analyses thus made it possible to identify the main problems and weaknesses.

The current SME Support Strategy aimed to continuously strengthen the competitiveness and economic performance of SMEs based on exploiting and unlocking their innovation potential, knowledge and education, internationalisation resulting from the benefits of the EU internal market and new markets in third countries and reductions in the energy intensity of business. In 2014–2020, these objectives were successfully achieved, especially through the Operational Programme Enterprise and Innovation for

² World Bank – *Czech Republic: Assessment of the SME Policy mix* (2019), available at: https://www.mpo.cz/assets/cz/podnikani/dotace-a-podpora-podnikani/oppik-2014-2020/aktualni-informace/2019/11/CR-SME-Assessment_Oct-20_.pdf

³ This analysis was funded by the EU, specifically the Structural Reform Support Programme. As part of a peer-review process, the actual draft strategy was also consulted with representatives of the World Bank and the European Commission.

Competitiveness (OP EIC) and other measures financed from national funds. The implementation of the SME Support Strategy was monitored and evaluated within the Report on the trends in the business environment⁴ for the relevant year, which describes the condition of and trends in the business environment from the perspective of reducing the administrative burden on entrepreneurs and strengthening the competitiveness of SMEs. While many of the priority areas that have been specified the SME Support Strategy are still relevant to Czech SMEs, given the current trends in the global economy and the rapidly changing conditions in world markets, the setting of support for SMEs needs to be adjusted in the next period so that key business-development measures and initiatives help Czech SMEs face the various challenges that are associated with the era of digitalisation, growing importance of services, climate and energy changes, pandemics and significant demographic changes and that might reduce their competitiveness.⁵

The aim of this document is to appropriately set the SME support policy and create such conditions where regulation does not worsen the position of Czech SMEs in terms of global competitiveness, and conversely, where the assumptions associated with the technological, educational and scientific landscape are transformed into strengthening the Czech Republic's international position.

4 Available at: <https://www.mpo.cz/cz/podnikani/malea-stredni-podnikani/studie-a-strategicke-dokumenty/>. For the sake of completeness, it should be noted that, until 2017, this was a report entitled Report on the trends in small and medium-sized enterprises and their support.

5 These are the so-called global megatrends, which can be understood as long-term trends that affect our thinking, activities, the organisation of society and the future reality of the world in the longer term.

Given that the strategy itself was created in cooperation with a wide range of actors, it is a comprehensive document with a large competence spillover, bringing together activities of a number of responsible ministries and organisations. The strategy also contains clear links to other key strategic or policy documents at the national level, which are used as a starting point to formulate SME-oriented measures – this should ensure that the set objectives can be realistically achieved through the measures specified. At the same time, it respects the hierarchy of these documents by taking into account the overarching Innovation Strategy of the Czech Republic 2019–2030 and the principles of the Economic Strategy of the Czech Republic 2030⁶ and by building on their priorities in the SME area. However, key European-level documents are also taken into account, in particular the SME Strategy for a sustainable and digital Europe. This increases coherence and ensures the necessary synergies within the various strategies. In addition, the key areas were formulated taking into account, among others, the National Reform Programme of the Czech Republic, the Council Recommendation on the National Reform Programme of Czechia and the Commission Report on the Czech Republic.

Based on the above documents and the Czech Republic's performance in several respected European and global indexes providing a comprehensive overview of the Czech economy, seven key areas have been identified on which the measures of this strategic document will focus and in which it is desirable to achieve a change or a shift.

6 Since the Economic Strategy of the Czech Republic 2030 had not been finalised by the Czech government as of the date of approval of the Strategy to support SMEs in the Czech Republic 2021–2027, these are the Economic Strategy principles as approved by the Czech government on 20 January 2020.

The Strategy to support SMEs in the Czech Republic 2021–2027 will thus contribute to the development of the following key areas:

- **business environment**
- **access to financing**
- **access to markets**
- **workforce, skills and education**
- **research, development and innovation**
- **digitalisation**
- **low-carbon economy and resource efficiency**

As part of each key area, the initial situation will be summed up in the form of key findings or issues that need to be addressed.⁷ Also, it contains strategic or, as the case may be, specific objectives and the measures to accomplish them. The various measures were designed taking into account both the need to address market failures and the specific needs of actual businesses. The implementation part of the strategy then takes the form of implementation plans for each of the key areas.

The strategy also aims to reduce the fragmentation of SME support, or more specifically, to clarify and rationalise the available support implementation tools and programmes, despite the fact that a number of new tools are being created at both the Czech and EU level for the period 2021–2027.

In addition, when supporting SMEs, it is necessary to take into account the different initial conditions existing in different types of regions (in terms of geographical location, economic performance, social structure, etc.) and, by extension, SMEs operating in such regions. Special emphasis needs to be placed on regions that are structurally disadvantaged and economically or socially vulnerable, as support for SMEs in this type of region can contribute significantly to reducing the risk of growing regional disparities. However, the specific form of the territorial dimension (especially the specific support method for the above regions) will be part of each implementation tool, in accordance with the *Regional Development Strategy of the Czech Republic 2021+* and – with respect to support for rural economy – in accordance with the *Rural Development Strategy*.

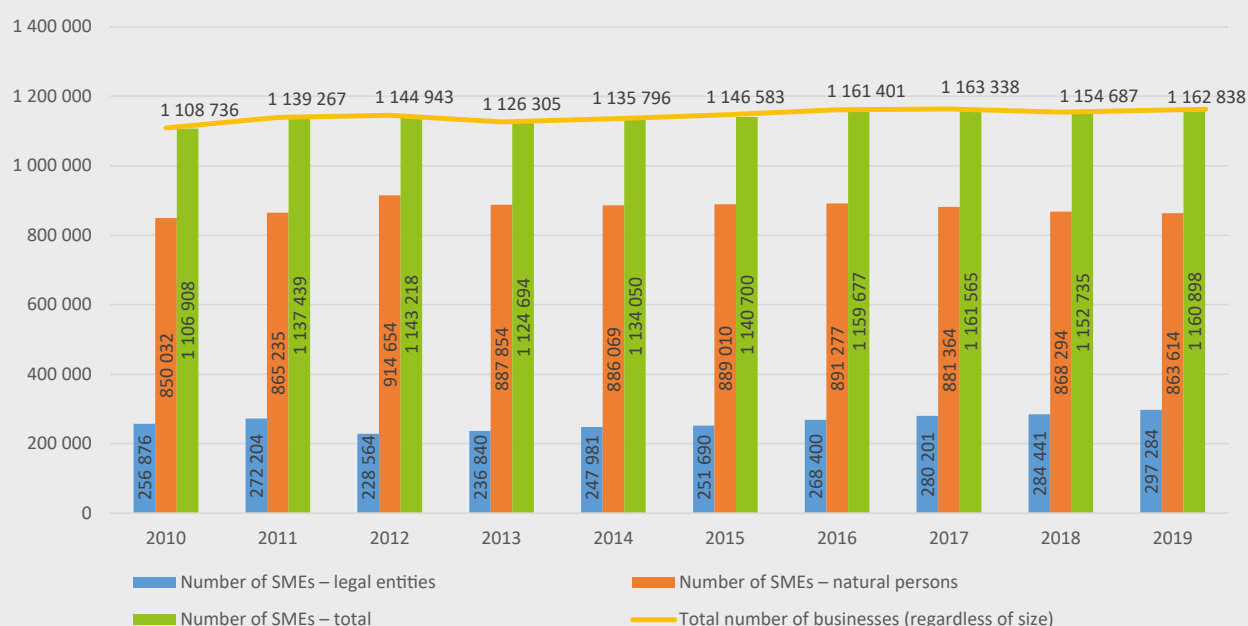
⁷ See the situation analyses for each of the key areas of the strategy, which complement the World Bank's analysis. This analytical document was prepared in cooperation with the ministries and other organisations concerned. Given its extent, only a summary is presented for each area and the complete MIT analytical document constitutes an annex to the strategy.

Figure 1: Illustration of the procedure used to select the key areas



BACKGROUND

Chart 1: Trends in active businesses in the Czech Republic in 2010–2019



Source: Czech Statistical Office, chart: Ministry of Industry and Trade⁸

This section⁹ aims to identify the main drivers of economic performance in the Czech Republic, any related limitations and general opportunities for directing support. While productivity has improved in the past two decades, there is still a significant gap between the Czech Republic and the region’s more developed countries such as Germany and Austria. In terms of improving labour productivity and catching up with the most developed countries, the Czech Republic has been lagging behind, which is also evidenced by the fact that labour productivity increased annually by an average of “only” 1.7% in the Czech Republic in the period 2000–2018. In this particular economic indicator, the rate of Czech Republic’s

convergence with the most developed countries is even slower than that of some comparable countries of Central and Eastern Europe that had a worse starting position at the beginning of the transition process.¹⁰ What makes these data particularly alarming is that SMEs are the backbone of the Czech economy and as such have a profound influence on this trend. In addition, the increase in productivity is limited mainly to older and larger businesses, mostly foreign-owned, and especially to businesses operating in the manufacturing sector. At the same time, improved productivity results mostly from an increase in capital rather than an improvement in aggregate productivity, which is key in the long term and, in view of the findings, due emphasis needs to be placed especially on newer domestic SMEs. From a macroeconomic perspective, the level of labour

⁸ MIT – Report on the trends in the business environment for 2019. The figures for 2019 are preliminary and do not include Section K under NACE Rev.2, as they were no longer monitored for 2019.

⁹ The data provided in this chapter are based primarily on the document: World Bank – Czech Republic: Assessment of the SME Policy mix (2019).

¹⁰ E.g. Slovakia experienced an increase of 2.1% and Poland 3%.

productivity in the Czech Republic stood at 75%¹¹ of Germany's level in 2018, yet this gap further varies across different size groups of businesses, namely the gap increases as firm size decreases. If we compare only firm-level data¹² according to selected size categories of businesses, in addition these do not include businesses in finance and insurance, the gap is even more pronounced. For small businesses the figure oscillates around 48% of the German level¹³, for medium-sized businesses it is 49.5% of the German level and for companies with more than 250 employees the average labour productivity of firms in the Czech Republic stands at 49.7% of the German level. The aggregate productivity of firms in the Czech Republic is significantly reduced by the fact that businesses that are among the most productive in the national context are growing at a slower pace than the most productive companies in the most developed countries in the world. In general, the lack of growth of productive businesses is caused by barriers against doing business and barriers against competition. However, given the current trends in I4.0 and the ageing population, productivity growth – especially in SMEs – will be crucial for long-term development.

From 2014 to 2018, Czech SMEs experienced a significant increase (32.9%) in value added, with the most significant increase taking place in micro-enterprises (39.3%) and small enterprises (38.7%). The actual proportion of value added generated by Czech SMEs accounted for 56% of the total amount in 2019, which is slightly below

the EU average of 56.4%. Czech SMEs' value added per employee was about EUR 24 400, which is more than half of the EU average of EUR 44 600.

Also, the Czech economy is characterised by a high participation in global value chains (GVC) and high levels of export sophistication. These factors have contributed the Czech Republic's productivity growth over the last 20 years, but there is little potential for further productivity gains through additional GVC participation and export sophistication. The Czech Republic should look to other areas, such as R&D-driven start-ups, to boost productivity. While exports show a high degree of economic complexity due to participation in key GVC sectors (i.e. automotive and electronics), the country's GVC participation is concentrated in the EU and primarily as a buyer of foreign inputs for re-exports rather than as a seller of inputs for further downstream processing. This indicates the importance of re-orienting GVC participation towards higher value-added production as well as diversifying exports outside EU markets. Further, SMEs participation in GVC could be improved, given the currently low share of SMEs trading via exporting or importing and the low share of SMEs with extra-EU goods imports or exports. The policies to support the shift in GVC are similar to those to support productivity growth, i.e. creating a favourable business environment in which new and innovative firms can emerge and grow and which supports firms' investments.

However, in innovation terms, the Czech Republic continues to rank as a moderate innovator. Innovation in terms of product, process, marketing and organisational innovation as well as R&D investments, however, is skewed towards larger

11 This is a basic assessment of convergence/divergence tendencies in terms of labour productivity trends in the economy as a whole.

12 See *World Bank – Background Note. Productivity and Innovation in the Czech Republic: A Firm-level Perspective (2019)*

13 This is 47.3% for firms with 10–19 employees, 48.7% for firms with 20–49 employees.

businesses and foreign companies. In general, SMEs have experienced either a stagnation or decline in innovation performance in recent years. The only criterion in which Czech SMEs perform better is product or process innovations, but they are much worse off in terms of the share of SMEs that introduce either product/process innovations or marketing/organisational innovations. In addition, the Czech Republic has a lower share of SMEs that invest in research and development compared to neighbouring Germany and Austria, but it outperforms the other countries of Central and Eastern Europe. At the same time, it is behind Germany and Austria and ahead of other countries in the region in all types of innovative collaboration involving SMEs¹⁴ (within the business, between business and with universities).

By contrast, the Czech Republic exemplifies strong investments in other innovation inputs, particularly in workers' on-the-job training. However, it performs considerably worse in improving management capabilities and there is a significant gap between large businesses and SMEs – managerial quality is lower in SMEs compared to larger businesses. Yet the Czech Republic as a whole lag behind in advanced digital skills, indicating the importance of increasing investments in this particular area, especially within SMEs that significantly lag behind in key I4.0 technologies. Businesses themselves are complaining about the lack of key skills and, given the trends in I4.0, it is expected that economic activity will require ever higher qualifications.

¹⁴ The only exception is the number of SMEs collaborating with each other in innovative activities, where it is second to Slovakia by a very narrow margin.

In this respect, it can also be noted that Czech SMEs were characterised by a relatively modest increase in employment (namely of 4.3%) in previous years (2013–2018). This phenomenon was linked to labour shortages, as SMEs have to compete with large companies that are able to attract more skilled workers with better pay and other benefits. This points to an even greater need to focus on matching the needs of the labour market and the education system, which should generate enough workers that are able to adapt to the new trends associated with the digitalisation of the economy. In 2019, SMEs alone accounted for 66.4% of total employment.

In the context of the EU's objectives for the coming decades, it is also of key importance to support the transition to not only digital but also sustainable economy through increasing the number of SMEs that use digital technologies and SMEs that apply sustainable business practices and models, while maintaining their competitiveness. In line with the EU's plans, SMEs make a significant contribution to a climate-neutral, resource-efficient economy that adopts a flexible approach to digitalisation.

From the perspective of the Czech business environment, it can be generally concluded that it operates relatively well in comparison to others, even though some key problems persist in the area of administrative burden or the implementation of e-government services, which represent obstacles to efficient resource allocation.

Last but not least, it should be noted that a precise quantification of the impacts of the decline in the Czech and global economy in connection

with measures against the spread of COVID-19 and their consequences for SMEs is not yet available. However, SMEs can be expected to be affected significantly by the economic downturn. According to Commission's forecasts, the overall unemployment in the Czech Republic will rise to 5.0%¹⁵, which is still a very optimistic scenario. The first effects on the economy can already be observed in 2020. Although gross domestic product increased by 6.2% in the third quarter of 2020 compared to the second quarter that had been affected by restrictions, it fell by 5.8%¹⁶ year-on-year in real terms, and an even sharper decline can be expected in the last quarter due to the acceleration of the second wave. The sectors in which SMEs are significantly represented have experienced a significant year-on-year decline. For example, in the second quarter of 2020, which was almost entirely affected by epidemiological measures, year-on-year industrial production fell by 23.6%. For the entire first half of 2020, sales in the services sector dropped by 12.0% year-on-year. The quarter-on-quarter drop in sales in selected services reached 14.4% in Q2, which was twice the record decline in early 2009.¹⁷ It will therefore be crucial to adopt necessary measures to effectively address the consequences of the pandemic, encourage and support private investment and increase the use of financial instruments to support liquidity, thus contributing to economic recovery.

To strengthen the productivity growth of SMEs in the Czech Republic, it is thus necessary both to eliminate firm-level limitations and to address broader structural issues. This is the context in which a global objective was formulated, which has been further developed into strategic or specific objectives within the key areas.

15 See *Council Recommendation on the National Reform Programme of Czechia for 2020 and the Council opinion on the Convergence Programme of the Czech Republic 2020*

16 CZSO – Preliminary GDP estimate – 3rd quarter of 2020

17 CZSO – Trends in the Economy of the Czech Republic – 2nd quarter of 2020

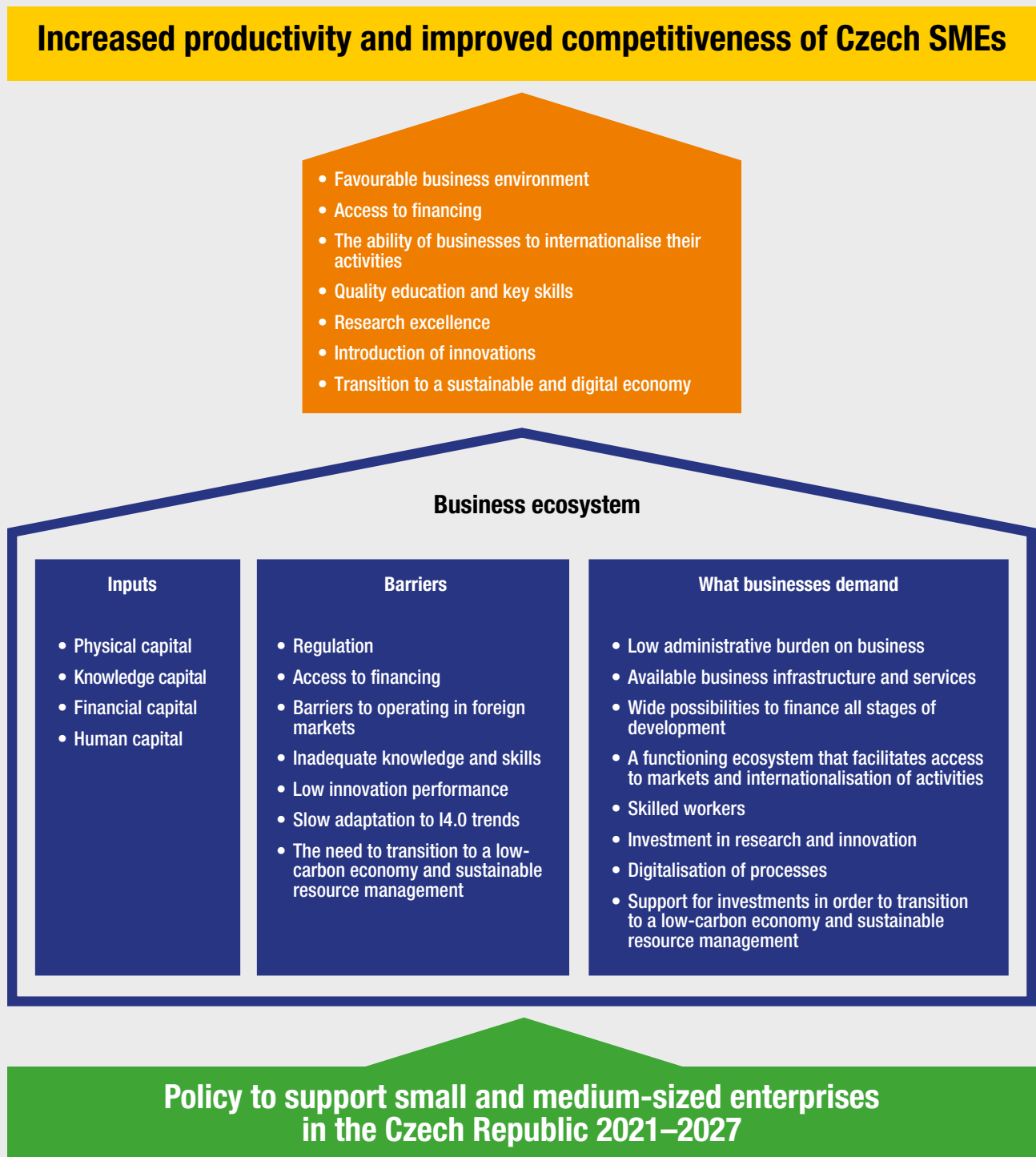
GLOBAL OBJECTIVE¹⁸:

Appropriately designed support for SMEs in the Czech Republic results in increasing their productivity and improving their competitiveness based on a favourable business environment, access to financing, the ability to internationalise their activities, quality education and key skills, research excellence, the introduction of innovations, and the transition to a sustainable and digital economy.



¹⁸ Indicators of the achievement of the global objective: these are parameters relevant to the topics addressed by this strategy within the Ease of Doing Business (World Bank), Global Competitiveness Index (World Economic Forum), Global Entrepreneurship Index (Global Entrepreneurship and Development Institute), Digital Economy and Society Index (European Commission), SBA Factsheet (European Commission) and European Innovation Scoreboard (European Commission). Furthermore, the following will be monitored at the SME level: labour productivity and total factor productivity, value added growth, exports and imports of high-tech goods and services, foreign trade balance, reduction in final energy consumption and the amount of energy produced from RES (Czech Statistical Office or Eurostat).

Figure 2: Conceptual framework of the Strategy to support SMEs in the Czech Republic 2021–2027





BUSINESS ENVIRONMENT

BASELINE SITUATION

The business environment generally consists of a wide range of factors that interact with each other and influence both current and future activities of entrepreneurs. One such factor is the administrative burden placed on entrepreneurs, which—in some respects—remains high and results in considerable difficulties for entrepreneurs.¹⁹ Czech SMEs often face complex and burdensome laws and, as a further complication, these laws are subject to frequent changes and SMEs find it difficult to constantly look out for and adapt to such changes. At the same time, SMEs have to deal with inadequate or fragmented information.

Even though the government makes a lot of effort to reduce the administrative burden on

¹⁹ See *MIT – Report on the trends in the business environment in the Czech Republic for 2019* – especially in the areas of providing duplicate data to CZSO and financial administration and making tax payments, in distraint and insolvency proceedings, or due to the inadequate pace of introduction of electronic public administration and interconnection.

businesses, according to surveys, entrepreneurs still perceive it as excessive. In recent years, the progress in applying the “Think Small First” principle has been rather modest, and e.g. the “SME test” or Regulatory Impact Assessment (RIA) are often carried out insufficiently and do not include proposals to mitigate regulatory impacts on SMEs. Furthermore, the Czech Republic ranked 115th out of 190 countries in terms of the difficulty of starting a new business.²⁰ While the time and costs required to start a business in the Czech Republic have decreased significantly since 2011, the number of mandatory administrative procedures has not decreased – which is closely related to the relatively slow introduction of administrative tasks that are performed digitally. Just as the establishment of a company is associated with a certain amount of bureaucracy, insolvency is also associated with high financial and

²⁰ See World Bank: *Doing Business 2019: Training for Reform*

time requirements in the Czech Republic. While the Czech Republic has in the past performed poorly in the “second chance” for entrepreneurs indicator, it has improved now performs in line with the EU average. Unfortunately, the vast majority of insolvencies of business corporations are still resolved by bankruptcy in the Czech Republic, which usually results in the company winding up, because entrepreneurs often lack access to early warning tools.

Another attribute of the business environment is the tax system, which is complicated in the Czech Republic and contains a number of controversial and non-systemic exceptions. This situation offers a lot of room for change, especially in terms of simplifying and digitising the tax administration system.

A key segment of the business environment is family businesses, which account for up to 85% of all private companies in the EU and 60% of jobs in the private sector.²¹ In the Czech Republic, most trade licences, small and medium-sized enterprises that have been built over the past 30 years are family businesses, and therefore, they have logically reached the moment of the first-generation replacement. Despite that, two thirds of owners do not have a succession plan, which may pose a major risk, because the succession process often takes place intuitively, under time pressure and with no conditions or rules agreed in advance.²² This may result in problems and misunderstandings both between those involved in the succession process and between the business and its environment (customers, suppliers, banks, employees, the public).

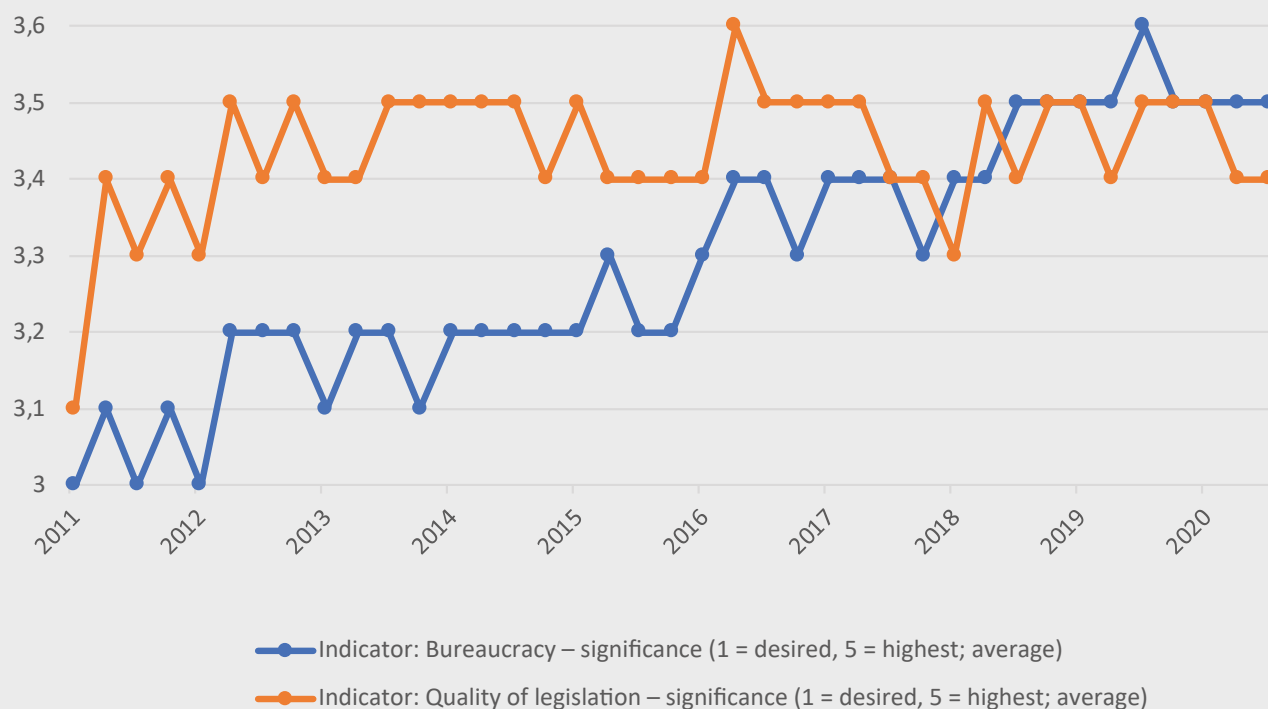
One other problem of the business environment in the Czech Republic, especially at the regional level, is the availability of retail services in rural areas. In 2018, another 513 independent Czech food and convenience shops went out of business, the vast majority of which were independently run shops with fewer than 50 employees.²³ The loss of basic service functions in rural areas can make local inhabitants unhappy and, in turn, force them to leave for better-equipped cities, thus slowing down the sustainable development of municipalities.

Also, a big challenge for the Czech business environment consists in strengthening the business infrastructure, not only for well-established SMEs, but especially for start-ups, spin-offs and scale-ups. It is therefore crucial to simplify the business conditions for SMEs and technology start-ups in order for them to develop and acquire the necessary know-how. However, the Czech Republic lacks a comprehensive strategy for their establishment, development and financing. In particular, the regional network of support for entrepreneurship and innovation centres operates with varying intensity, in some self-governing regions the activities of innovation centres are inadequate and in two they are non-existent.²⁴ At the same time, the supply of good-quality business premises and areas is limited, and it thus represents one of the limiting factors to further business development. Therefore, the demand for brownfield properties and their revitalisation for use as business infrastructure for SMEs has been growing slightly in recent years (from 20% to 22% of all types of business properties).

21 Ernst and Young Family Business Yearbook 2014
22 IPSOS, ASMEC: Annual survey of family business in the Czech Republic (2018)

23 Asociace českého tradičního obchodu: Development of the independent market 2008–2018
24 Vysočina Region and Karlovy Vary Region

Chart 2: Business environment quality according to a survey among businesses



Source: Czech National Bank²⁵

²⁵ See the ARAD time series database

STRATEGIC OBJECTIVE – FAVOURABLE BUSINESS ENVIRONMENT FOR SMES

The successful operation of SMEs in the Czech Republic and their expansion into foreign markets are, to a large extent, conditioned by a well-functioning and enabling business environment that takes into account all types of SMEs. It will therefore be crucial to create a favourable business environment and enhance the business culture in order to increase motivation to start new innovative businesses, remove obstacles to the growth of businesses and stimulate their dynamic development. Both start-ups and existing businesses often do not require direct support by the state, but they do need to operate in a stable and predictable environment that is conducive to business activity, makes it possible to develop

new ideas, does not impose a bureaucratic burden and various regulatory requirements, which in turn hinders growth and competitiveness. Only in such an environment are individuals motivated to think creatively and be innovative, implement their ideas, establish companies and expand into domestic and foreign markets.

Therefore, measures relating to the business environment will mainly be systemic in nature and will focus on changing or modifying existing legislation so as to facilitate business activities, the digitalisation of state administration and, last but not least, financial support. The removal of legal and regulatory constraints for

entrepreneurs will make it easier to establish and run a business, which will ultimately increase the number of businesses and enable their growth, improve investment opportunities and create the conditions for job creation.

Of course, the necessary measures need to be taken across the EU, so that Member States are called upon to apply the “Think Small First”, “Only Once” and “Digitisation as a Standard” principles more strictly within the framework of the *European Small Business Act* and the *SME Strategy for a sustainable and digital Europe*.

Specific objective – Reducing the administrative and legislative burden on entrepreneurs

Reducing the administrative and legislative burden on SMEs and improving e-government is a continuous effort that will make it easier to start and run a business and to satisfy the related obligations which are often duplicate and time-

consuming. In general, the measures specified will result in an improved business environment, and a better application of the “Think Small First” principle and RIA will make it possible to prevent unnecessary regulation for SMEs.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Evaluate the effectiveness of the Methodology for Regulatory Impact Assessment (RIA) on SMEs and subsequently revise it or develop a new methodology. 	OG CR and MIT
<ul style="list-style-type: none"> • Provide training at ministries in the form of workshops on how to carry out SME impact assessments and apply the “Think Small First” principle. 	OG CR and MIT
<ul style="list-style-type: none"> • Implement the various measures specified in the <i>Plan to systematically reduce administrative burden on business 2019–2022</i> and, once it has been completed, propose further steps in this area. 	MIT and other central bodies
<ul style="list-style-type: none"> • Create a Single portal to keep records of inspections (an inspection website) to reduce the number of inspections, especially for small entrepreneurs. 	MIT

Specific objective – Making it easier to start a company

This issue is closely related to reducing the administrative burden. The aim is to enable the use of digital tools and simplify the procedures to start a company. Adopting an amendment to the relevant legal regulations in the area of capital companies will simplify the process of starting

a company for founders who want to use digital tools and establish their company from their own home. Providing good quality information should also help boost motivation and support for starting a business.

MEASURE

(CO-)RESPONSIBILITY

- | | |
|--|----|
| • Better inform those who want to start a company about all the necessary steps and documents. | MJ |
| • Create a new system through which capital companies can be established and registered fully online, without the physical presence of the founder. For the purpose of starting a company, model memoranda of association will be prepared and made publicly available on the web. | MJ |
| • Simplify the process of establishing a capital company from the founder's perspective and reduce the number of tasks that need to be completed. | MJ |
| • In specific cases, ensure that information on the beneficial owner of a legal entity is entered in the register of beneficial owners free of charge. | MJ |

Specific objective – Increasing the effectiveness of business bankruptcy prevention and resolution

The introduction of preventive restructuring legislation can be considered a suitable tool to prevent bankruptcy, which will offer SMEs the opportunity to timely access the necessary information and raise SMEs' awareness of the possibility to resolve difficult situations in this way. The introduction of this legislation

should ultimately improve the financial health of the business and reduce the costs of possible insolvency proceedings, including the implementation of early warning tools through remote access at minimal cost to entrepreneurs (possibly the Czech Republic's participation in the Early Warning Europe project).

MEASURE

(CO-)RESPONSIBILITY

- | | |
|---|----|
| • Transpose Directive (EU) 2019/1023 of the European Parliament and of the Council through the adoption of a new act on preventive restructuring. | MJ |
| • Publish "early warning tools" that alert entrepreneurs to emerging financial problems, and publish key information about preventive restructuring legislation and the content of the "restructuring plan" on the justice.cz portal. | MJ |
| • Make early warning tools available to entrepreneurs, in order to enable them to identify financial difficulties in a timely manner and motivate them to resolve such difficulties. | MJ |

Specific objective – Simplifying the tax system for SMEs

This objective aims to streamline the tax system in the Czech Republic in order to minimise the tax burden on individual taxpayers, especially SMEs. Tax system simplification and tax reduction are discussed in more detail in the *MIT's Trade Package*. At the same time, it is desirable to streamline and digitise the tax administration

system. It is expected that the clarity of tax legislation will be improved which, in turn, will make it easier, less time consuming and less costly to fulfil tax obligations. Clear and simple tax administration can also help increase interest in starting a business.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none">• Revise existing tax laws and ensure they are clear and easy to understand for SMEs.	MF
<ul style="list-style-type: none">• Introduce new (electronic) forms of communication with the tax administration (the MOJE daně portal).	MF
<ul style="list-style-type: none">• Introduce a fixed tax for sole traders or self-employed entrepreneurs with a turnover of up to CZK 1 million.	MF

Specific objective – Facilitating family business succession

The aim is to make it easier for many family businesses or small and medium-sized businesses to be passed on to the next generation or another successor, thus preventing problems in the transfer of businesses. In addition, support

for family businesses will also make it possible for this type of businesses to development, grow and strengthen their position within the Czech economy as a pillar of the Czech Republic's economic stability and regional development.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none">• Organise seminars and workshops aimed at promoting and supporting family businesses and facilitating their succession to the next generation.	MIT
<ul style="list-style-type: none">• Support family businesses under the national programme of guarantees (GEN) for the purchase of a business share in a family business, acquisition of shares of a family business, and purchase of a business establishment (i.e. production site) of a family business.	MIT and CMGDB

Specific objective – Providing retail and other services in rural areas

Support for retail shops, which often operate at a loss in the long-term and gradually wind up, is crucial with regard to rural depopulation that is associated with the disappearance of services from municipalities. Targeted support for retail shops and services should lead to maintaining

the quality of life of the population in connection with the availability of well-functioning services in rural areas, and preventing the depopulation of municipalities, thus contributing to sustainable rural development.

MEASURE

(CO-)RESPONSIBILITY

- Create a national programme to support retail and other services in rural areas. MIT

STRATEGIC OBJECTIVE – STRENGTHENING AND DEVELOPMENT OF BUSINESS INFRASTRUCTURE

Business infrastructure is an integral part of the business environment, and the development of business activities in the Czech Republic is conditional on the availability of suitable infrastructure for business. It is thus necessary to complete the network of business and innovation centres offering a wide range of good quality services, and to make it possible to resume the use of outdated business infrastructure, which will ultimately have a significant effect on entrepreneurship, motivation to start companies or invest in expanding existing and innovative production in SMEs. At the national level, the issue of developing business infrastructure is

addresses by the *Innovation Strategy of the Czech Republic 2019–2030*, the material entitled *System of support for the start-up a spin-off environment in the Czech Republic*²⁶ which was prepared by the CzechInvest agency and which sets in detail the elements of the innovation ecosystem at the different development stages of a start-up, and in the case of obsolete business infrastructures the *National Brownfield Regeneration Strategy 2019–2024*.

²⁶ The material was created as a joint effort by the CzechInvest agency and representatives of the Business and innovation infrastructure platform that is comprised representative of regional innovation centres and business incubators.

Specific objective – Creating and strengthening business infrastructure for SMEs, including spin-offs, start-ups and scale-ups

Given that emerging innovative businesses (start-ups), including those based on the results of research and development (spin-offs) and fast-growing businesses (scale-ups), are among the main drivers of innovation in the economy, strengthening the development of a spin-off/

start-up/scale-up ecosystem could significantly contribute to improving the competitiveness and increasing the added value of SMEs. Business activities need to be supported at their very early stages and during their growth so that they do not disappear prematurely. In order for start-

ups to be able to emerge, innovate, test various new business models and bring their innovations to the market, there has to be a well-developed support ecosystem that provides entrepreneurs with access not only to finance, but also to business and investor networks and consulting services. Therefore, it is necessary to ensure that innovation and business centres with verified quality standards operate at the level of all self-governing regions. Deeper cooperation between operators of business incubators, innovation centres and accelerators and leading technology companies and cluster organisations in providing

special services to start-ups and scale-ups will allow them to better navigate issues relating to advanced technologies.

Attention also needs to be given to the development of regional centres within the existing support infrastructure, which will help establish cooperation with professional industrial and product designers, develop new products or product lines, especially in industrial design or hi-tech, and subsequently achieve better internationalisation of SMEs.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Create a national strategy for the establishment, development and financing of start-ups. 	MIT and CzechInvest
<ul style="list-style-type: none"> • Set up consulting points to support awareness-raising activities for (potential) entrepreneurs across the Czech Republic with links to regional innovation centres and existing business incubators. 	MIT and CzechInvest
<ul style="list-style-type: none"> • Support the development or, where relevant, establishment of regional centres and hubs (especially in the area of KETs and the application sectors defined within the National RIS3 Strategy, including the cultural and creative industries) within the existing support infrastructure. 	MIT, CzechInvest and CzechTrade

Specific objective – Increasing the availability of business properties to SMEs

The supply of good quality business infrastructure, especially properties suitable for SMEs, is an integral part of the development of business activities. Due to the limited supply of good quality business premises and areas, brownfield sites will be used for these purposes. It is support for properties for business that creates synergies with measures to develop businesses, because SMEs

can take advantage of newly built or renovated buildings and infrastructure. This will also generally support the surrounding business environment, create new jobs, which will provide an impetus for further development of the area. The regeneration of brownfields should thus contribute to increasing the number of business properties that are suitable for SMEs' business activities.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Support the regeneration and revitalisation of brownfields by SMEs in order to improve business infrastructure. 	MIT

ACCESS TO FINANCING



BASELINE SITUATION

In the Czech Republic, there is a wide and diverse portfolio of financial products that are offered by banking and non-banking institutions, private individuals, venture capital funds or the state. Due to high bank liquidity, well-established entrepreneurs do not experience problems with access to bank loans, leasing or factoring in times of economic boom. Alternative sources of financing include venture capital, angel investments, bond issues, crowdfunding or state support.

However, the Czech Republic is characterised by a rather weak investment environment that would encourage the establishment of new businesses and the financing of new SME projects, i.e. inadequate availability of capital to SMEs and especially start-ups. Another problematic factor is that entrepreneurs lack an adequate understanding of the possibilities of

financing their business plans and are not aware of new forms of financing (e.g. corporate bonds, blockchain or IPOs).

While crowdfunding has become a popular tool for obtaining the necessary financial resources, equity financing is underdeveloped compared to EU countries of a similar size²⁷ or even to some Central and Eastern European countries²⁸. It lacks the necessary volume and willingness to invest in the early stages of business development (pre-seed, seed, start-up and later stage venture). Private capital financing thus plays a marginal role in business financing. The angel investment market is poorly visible, fragmented, and seems to only involve a few individuals. State subsidy

²⁷ E.g. Ireland and Austria, see *World Bank – Stimulating business angels in the Czech Republic (2018)*.

²⁸ E.g. Hungary, Estonia and Poland, see *Invest Europe (June 2020): Central and Eastern Europe. Private Equity Statistics 2019*.

support focuses mainly on businesses older than three years and is often associated with high administrative complexity in preparing the application for support, or in implementing the actual project.

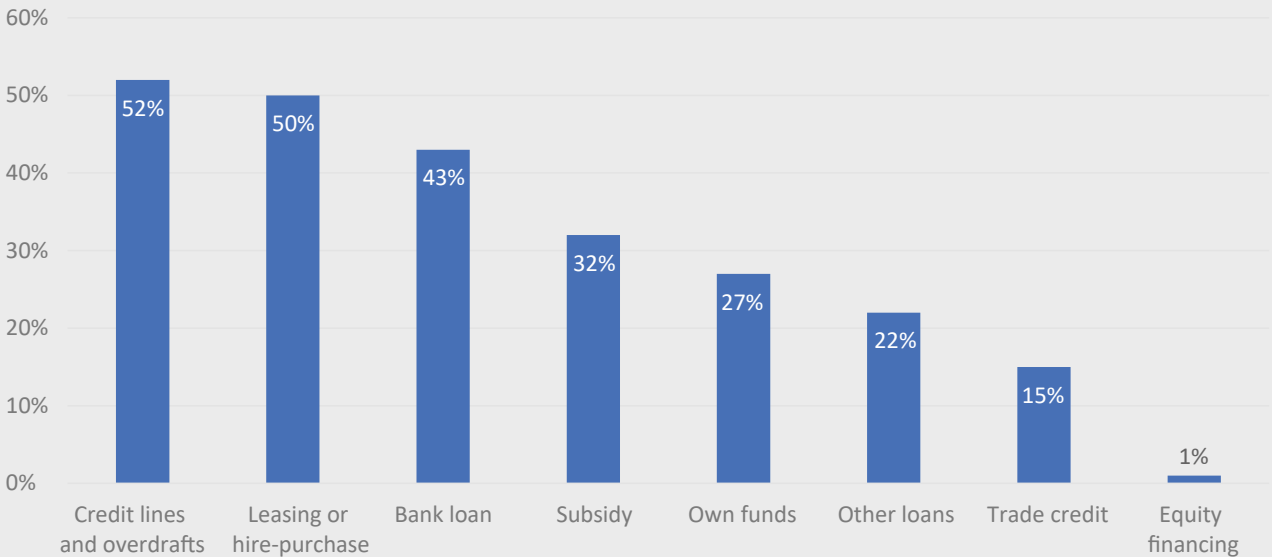
Due to high bank liquidity in times of economic growth, access to financing can be assessed as favourable for well-established businesses.²⁹ However, the situation for innovators at the idea stage or start-ups is more complicated, which is also confirmed by surveys³⁰ conducted among

actual entrepreneurs. Investment in such entities appears to be high-risk for investors and banks, mainly due to the absence of a relevant business history, lack of collateral or lack of information to assess their credit risk or evaluate their intangible assets. However, without adequate capital, there are not enough emerging businesses with growth potential, small and medium-sized businesses cannot expand, fulfil their potential and, by extension, contribute to the entire economy.

²⁹ That said, the availability of bank financing may be uncertain even for well-established businesses in times of economic recession.

³⁰ See M. Staszkiwicz and D. Havlíková – *Czech start-ups 2016, Aspen Institute Praha; Keiretsu Forum - Startup Report 2019–2020; Keiretsu Forum – Startup Report 2017–2018*

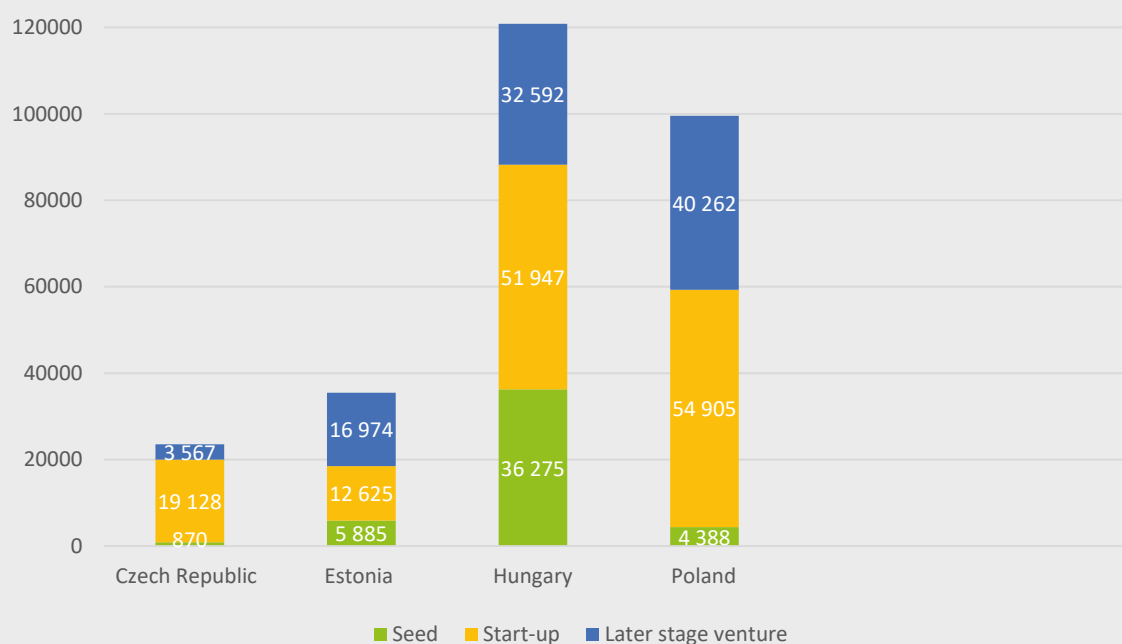
Chart 3: Sources of SME financing in the Czech Republic in order of relevance according to a survey among businesses in 2020



Source: European Commission/European Central Bank³¹

³¹ See *Survey on the access to finance of enterprises (SAFE) 2020*

Chart 4: Venture capital investments in selected Central and Eastern European countries in 2019 (in thousands of EUR)



Source: Invest Europe³², chart: Ministry of Industry and Trade

³² See Invest Europe (June 2020): Central and Eastern Europe. Private Equity Statistics 2019

STRATEGIC OBJECTIVE – DIVERSIFICATION OF SME FINANCING SOURCES AT ALL STAGES OF DEVELOPMENT

In the area of access to financing, it is necessary to focus on intensifying the opportunities to use alternative sources of financing, which include venture capital, angel investments, bond issuance or investment crowdfunding (collectively referred to as equity financing). Emphasis will be placed both on developing this type of financing and on increasing the willingness to invest in the early stages of firm development (pre-seed, seed and start-up). State aid³³ will be oriented towards companies in all stages of development,

i.e. not only for well-established firms, but also for start-ups and new innovative businesses, i.e. innovators at the idea stage or start-ups. The main aim is to provide an adequate amount of capital and to support the development of businesses with growth potential. For these reasons, it will be necessary to continue developing the capital market in the Czech Republic on the basis of the *Strategy for the Development of the Capital Market in the Czech Republic 2019–2023*, which will provide SMEs with an alternative to both bank financing and public support from subsidy programmes.³⁴

³³ Within state aid, the present strategy primarily relies on subsidy support (non-repayable form of support) to support the measures specified in the different key areas, but the aim of this area is to significantly expand the use of financial instruments (repayable form of support) in 2021–2027.

³⁴ As the economic performance of the Czech Republic increases, the amount of public support from the EU for Czech businesses will most likely decrease.

Through a well-developed capital market, businesses will thus be able to achieve greater business freedom and better cash flow, cost savings, or they can make investments that banks (for various reasons) refuse to support. This will increase businesses' efficiency and thus their competitiveness and, at the same time, businesses can innovate their products faster, expand in the domestic and foreign markets or diversify their capital structure, which will make them better prepared for economic fluctuations and debt refinancing. Equity investments are also typically associated with the transfer of know-how or access to technology and the involvement of the investee firm in high-potential cooperation mechanisms. A well-developed capital market is thus a prerequisite for setting up an environment favourable to innovation, which will enable the development of top hi-tech and FinTech companies in the Czech Republic. The ability to quickly allocate capital and knowledge to businesses with the highest potential is also one of the key factors to productivity growth.

In addition, it is crucial to provide a wide supply of suitable financial products with accompanying services (especially consulting, mentoring, coaching) for start-ups and young innovative businesses, which will reflect the stage of their development, growth potential, line of business and current needs. Improving the conditions for financing start-ups – in terms of a wide supply of alternative financing and encouraging the use of private capital that is comparable to foreign competitors – should result in the creation of more businesses and, at the same time, more technologically demanding solutions that are implemented by start-ups. As a by-product of more frequent contact with experienced investors from the venture capital landscape, young entrepreneurs will improve their managerial skills, which will help improve the quality of company management and develop innovative businesses.

Specific objective – Increasing SMEs’ interest in the possibility of financing their plans through the capital market

The aim is to ensure that SMEs’ representatives are sufficiently knowledgeable in order to finance their debt and/or equity through the capital market, where appropriate. The “Capital Guide” website will be used for that purpose – it aims primarily to educate SMEs on capital-market

financing instruments and it will also help those interested in financing to choose an appropriate financing instrument. An additional objective is to improve the promotion and increase the publicity of the products offered by CMGDB and MIT.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> Implement a communication strategy towards SMEs on the possibilities of financing their business through the capital market. 	MF

Specific objective – Developing investment crowdfunding and blockchain technology in the Czech Republic

The aim is to initiate the development of disruptive methods and technologies, which also include investment crowdfunding and blockchain (or distributed ledger technology (DLT) in general). However, these are currently facing inadequate legislation (e.g. licensing crowdfunding platforms, designating a supervisory authority, the conditions for carrying out supervision of crypto-asset markets), which may hamper their development. At the same time, entrepreneurs do not yet have a deeper understanding of DLT technology and thus are not aware of the potential benefits of this instrument and how they could use it for their financing. Therefore, the main aim is to take appropriate measures to ensure the further functioning and development of investment-crowdfunding platforms and blockchain technology as instruments that will offer faster, more efficient and more cost-effective financing for SMEs.

In view of the *SME Strategy for a sustainable and digital Europe*, which sets out the need to launch a DLT-based initiative enabling issuance and trading of SME bonds across Europe³⁵, a project for a decentralised SME securities market that is based on the European Blockchain Services Infrastructure will be implemented. It aims to help SMEs recover from the crisis caused by the Covid-19 pandemic and, above all, to maintain and restore their competitiveness through investments. DLT will simplify SMEs' access to finance by reducing costs, improving transparency and auditability, and increasing the availability of capital and debt by opening up direct access to the pan-European market. The project thus also fulfils the strategy entitled *Digital Czech Republic – Digital Economy and Society* and the *Innovation Strategy of the Czech Republic 2019–2030*.

³⁵ In 2020, the Czech Republic as the chair of the V4 group initiated a proposal for a pan-European decentralised SME securities market that is based on the European Blockchain Services Infrastructure (EBSI). The Czech Republic is leading the implementation of the project within the European Blockchain Partnership (EBP) between the European Commission and the Member States.

MEASURE	(CO-)RESPONSIBILITY
• Set the conditions for the operation and provision of investment crowdfunding under the conditions existing in the Czech Republic (with regard to EU legislation).	MF
• Set the conditions for the operation of the market in DLT-based crypto-assets under the conditions existing in the Czech Republic (with regard to EU legislation).	MF
• Implementation of the EBP/EBSI project – SME financing through DLT securities.	MF and MIT

Specific objective – Intensifying the use of venture capital in the Czech Republic

To achieve technological progress, it is crucial to develop the venture capital market. In the Czech Republic, it is therefore necessary to ensure a sufficient supply of venture capital for projects and businesses in the early stages of development with a high level of risk (pre-seed, seed, start-up and early stage) in order to support the creation of new innovative and technology-based businesses, ideas and innovations, which will ultimately improve the competitiveness of the Czech economy. Venture capital provides investee companies not only with an immediate inflow of funds, but also with coaching and mentoring by experienced investors. Supported firms go through a certain “self-certification” system, which puts them in a better position to receive investment from other sources.

The Czech Republic will therefore help to improve the operation of the venture capital market through the direct involvement of public capital in investment, either through a dedicated state financial institution or indirectly through private venture capital funds. It will thus complement private capital in the market and initiate the development of both the market and private investment teams

in underfunded areas (typically the high-risk stages of seed financing). Private capital should then be involved in the co-financing of public funds as much as possible, which will enable the market to operate even after the available resources from European funds have been reduced. In order to improve SMEs’ access to venture capital, existing financial instruments will also be continued and developed.

Since angel investors (business angels) play an increasing role in providing venture capital, thus contributing to economic growth and technological progress, a large and stable community of Czech angel investors is an essential building block of a well-functioning start-up ecosystem, as the timely supply of capital will ensure that more good ideas can take root and new thriving companies can emerge. For this reason, the measures will also focus on ensuring the best possible environment for such investors, in accordance with the *Strategy for the Development of the Capital Market in the Czech Republic 2019–2023*. In order to shape a good policy to support angel investment, it is also crucial to provide adequate data and information support and good visibility into these activities in the Czech Republic.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> Continue the implementation of financial instruments that were launched in the 2014–2020 programming period or are planned for the 2021–2027 period.³⁶ 	MIT and CMGDB
<ul style="list-style-type: none"> Implement measures to improve the conditions for the operation of business angels in the Czech Republic as specified in the <i>Strategy for the Development of the Capital Market in the Czech Republic 2019–2023</i>. 	MF
<ul style="list-style-type: none"> Evaluate the investment strategy and the possibility of cooperation with the EIF and propose a solution that would allow the Czech Republic to draw more funds from the EIF. 	MF

³⁶ These include the Central Europe Fund of Funds, the OP EIC Fund of Funds (both funds of funds are managed by the EIF), the IPO Fund to support SMEs in issuing shares on alternative trading platforms (managed by ČMZRB Investiční, a.s.).

Specific objective – Ensuring broad access to good-quality bank financing and credit

Given that guarantee schemes for SMEs have proved to be a good tool to facilitate SMEs' access to bank credit over the last two decades, they will continue to be provided. Guarantee and credit instruments are provided as repayable forms of support through the CMGDB Group, which uses both national budget and European funds for its interventions. The bank supplements these resources with funds obtained in financial markets. In providing loans, guarantees or equity investments, CMGDB works with commercial financial institutions, which allows it to achieve a leverage effect through a combination of public and commercial sources of financing. In this way, it does not primarily push private capital out of

the market, on the contrary, it complements it and supports improved access – especially for SMEs – to financing for their projects. The provision of guarantees and loans will then be combined with a subsidy element.

In order to provide comprehensive support, the provision of financial support will be enhanced through additional consulting and assistance services. In particular, start-up entrepreneurs will appreciate support and advice on financing their projects in line with their current needs, or mentoring and coaching services that will aim to improve their entrepreneurial skills (managerial competencies, financial skills, marketing, etc.).

MEASURE

(CO-)RESPONSIBILITY

- | | |
|--|----------------------------|
| <ul style="list-style-type: none"> On the basis of an analysis of the effectiveness and efficiency of guarantee and loan programmes for SMEs, continue to implement well-proven guarantee and loan programmes or, where relevant, change the design of the programmes according to current needs and demand (including support for start-ups). | MIT and CMGDB |
| <ul style="list-style-type: none"> Combine financial instruments with a subsidy element – e.g. with a financial contribution to pay interest on loans provided by commercial banks, cancellation of repayment of part of the principal, including financing the cancellation of commercial loan repayments in the case of a guarantee instrument. | MIT and CMGDB |
| <ul style="list-style-type: none"> Supplementing financial support (loans, guarantees) with soft measures and accompanying services – business, consulting, mentoring, coaching and technical assistance services. | MIT, CMGDB and CzechInvest |

Specific objective – Creating favourable conditions for the financing of start-ups and scale-ups

In order to fulfil their potential and achieve dynamic growth, young businesses need access to a broad portfolio of products in the capital market. Start-ups or innovators at the idea stage often manage their projects alone or within a small group of people, so they do not have enough time to seek out the most suitable method of financing. For the purposes of their development, start-ups will be provided with support in choosing a suitable financial product in the market or in order to bring together start-ups, investors and providers of financial support.

At the same time, it will be ensured that start-ups and innovators have the opportunity to choose from multiple types of financial products in order

to secure optimal financing of their projects, taking into account the current needs and stage of development of the business. To help achieve that, a start-up support scheme will also be created. Complementary to supporting the development of seed financing, the creation of capital instruments for the transfer of research results from research organisations (especially universities) to business practice will also be supported as it will help develop promising technology start-up and spin-off firms. The measures that have been specified will thus ensure a sufficient amount of capital and support the development of businesses with growth potential.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> Expand and promote the CzechInvest agency’s consulting for start-ups on the selection of the most suitable financial product on the market (including public support programmes). 	CzechInvest
<ul style="list-style-type: none"> Bring together start-ups and investors or support providers through match-making activities. 	CzechInvest
<ul style="list-style-type: none"> Announce a call aimed at financing innovators at the idea stage, start-ups and scale-ups (e.g. through creating a START-UP VOUCHER scheme). 	MIT and CzechInvest
<ul style="list-style-type: none"> Stimulate (quasi)equity financing for start-ups and scale-ups and support the establishment of additional venture capital funds, business angels, technology transfer, commercialisation fund, scale-up fund or proof-of-concept fund/pre-seed fund for the riskiest investments in early business stages (the idea stage, spin-offs), including funds operating on a co-investment basis. 	MIT, CMGDB and CzechInvest
<ul style="list-style-type: none"> Provide support for research and innovation in start-ups and spin-offs through support programmes. 	MIT and TA CR
<ul style="list-style-type: none"> Map the start-up environment through the Start-up Report. 	CzechInvest and MIT

The image shows two business people in suits shaking hands. Overlaid on the image is a complex digital network of white lines and nodes, with several circular icons containing human figures. The background is a blurred cityscape at night with lights.

ACCESS TO MARKETS

BASELINE SITUATION

The largest share of Czech exports and imports is traditionally realised within the EU, in 2019 almost 84% of Czech exports of goods went to EU countries. Approximately 16 thousand SMEs contribute to these exports, this number has been approximately the same since 2012.³⁷ The EU Single Market thus represents the primary target market for Czech SMEs and, in turn, the natural environment for their expansion and growth, yet the relative costs needed to overcome various obstacles in a foreign market are significantly higher for SMEs than for large businesses. For SMEs, access to capital, information and knowledge is generally more difficult and costly, which results – among other things – in their weaker emphasis on internationalisation and marketing activities abroad. The main barriers that have been identified in the EU internal market include in particular lack of access to information, costly

and complex permitting procedures, restrictions on legal form and shareholding in the provision of services, shortcomings in mutual recognition, or unclear interpretation of EU legislation.³⁸ In recent years, trade between the Czech Republic and other advanced economies has been thriving, which is indicative of the growing ability of domestic companies to establish themselves in foreign markets outside the EU. Still, the volume of foreign trade with other developed economies outside the EU remains low relative to their size. However, SMEs continue to face significant constraints and challenges that are related to inadequate funding, ability to upgrade and protect their own technology, meeting the required standards and quality of products and services, inadequate knowledge of foreign markets or frequently changing business rules and procedures, as well as a lack of internal skills such as marketing.

³⁷ Report on the implementation of the Export Strategy of the Czech Republic 2012–2020 for the year 2019

³⁸ SME Strategy for a sustainable and digital Europe

The main driver of the Czech Republic's high export performance was foreign demand for products from the Czech Republic that was satisfied by branches of production-type multinational companies, which also benefited domestic businesses through subcontracts. To a lesser degree, the increasing competitiveness and export performance of domestic businesses also contributed. The export activities of Czech SMEs are also largely determined by their size. While in the category of businesses with 50–249 employees, almost 76% of Czech companies export (which is comparable with neighbouring countries), in the category of businesses with 10–49 employees it is only less than 31%, i.e. in this indicator the Czech Republic lags behind neighbouring countries. In the category of micro-enterprises, i.e. enterprises with 0–9 employees, Czech companies' export activity is very low, it is reported by as few as 0.7% of businesses. This figure is also significantly low by comparison with neighbouring countries.³⁹ However, for innovative start-ups the situation is completely different, with foreign markets being the primary market for more than 60% of Czech start-ups.⁴⁰ Available data suggest that, by focusing on foreign markets, start-ups are slightly more likely to secure stable revenue, and the data also confirm a strong relationship between internationalisation and innovation. This means that internationally active businesses are more competitive than their domestic peers and can play an important role in global value chains.

The Czech Republic is also characterised by a low degree of internationalisation of SMEs, which is also related to the limited ability to expand

to foreign markets. Even though the ability of domestic businesses to succeed in foreign markets is improving consistently, it remains strongly limited to the neighbouring countries and markets in Europe. Especially SMEs have to cope with insufficiently developed competencies and capacities for foreign trade and they also have to face many barriers to the internationalisation of their activities, especially as the geographical and cultural distance of the target markets from the Czech Republic increases. Within the internationalisation of SMEs, exports and GVC participation thus remain oriented towards regional value chains, which results in missing out on opportunities for integration outside the EU Single Market.

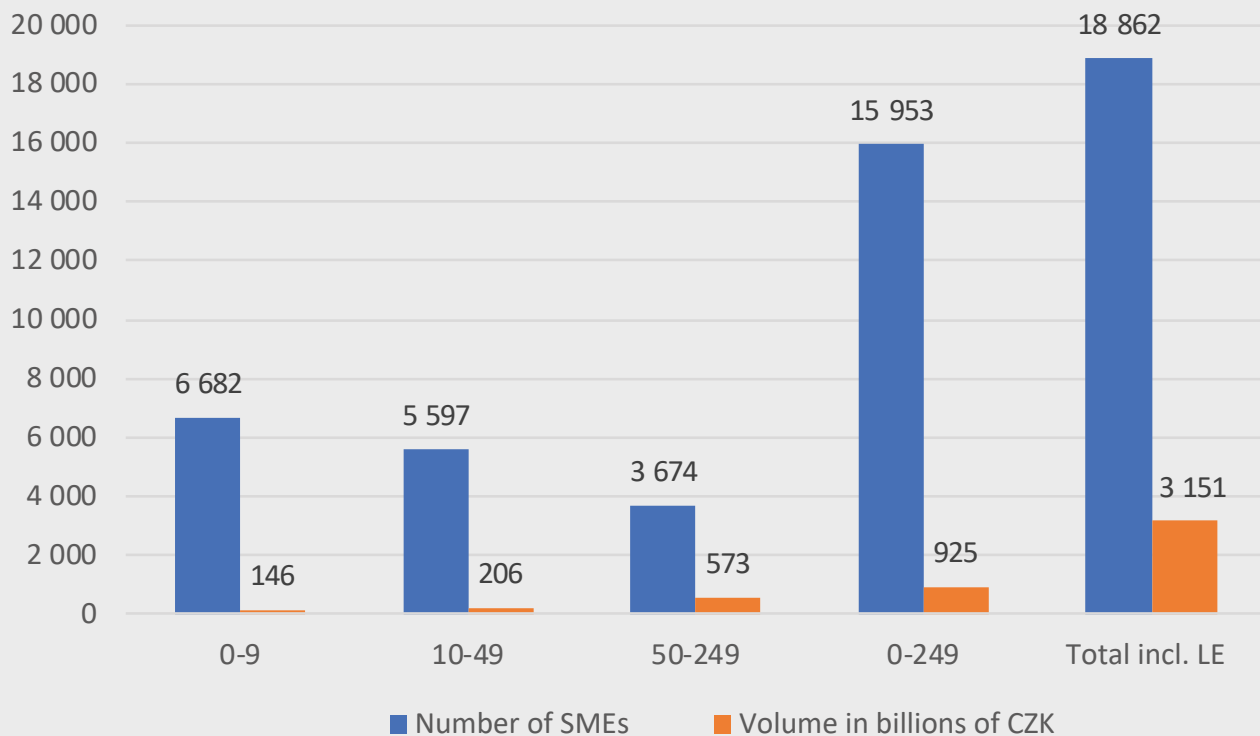
As a small and open economy, the Czech Republic is highly integrated into global value chains. However, SMEs tend to have weaker technological innovation capabilities and are less likely to integrate into GVCs through exporting.⁴¹ Therefore, it remains necessary to focus on the issue of supporting the internationalisation of SMEs, including addressing their lack of export orientation and diversification and high value-added GVC participation, as domestic companies also show low value added compared to their foreign peers. It is not only the participation of businesses in GVCs, but also their position in GVCs with greater knowledge and technology transfer that plays a key role. This is related with companies' inadequate investment in higher value-added production through innovation or technology development, which results – among other things – in poorer performance in terms of productivity, position in value chains and the introduction of new technologies.

39 World Bank – Czech Republic: Assessment of the SME Policy mix (2019)

40 Maria Staszkiwicz a Daniela Havlíková – Czech Startups 2016, Aspen Institute Prague

41 World Bank – Czech Republic: Assessment of the SME Policy mix (2019)

Chart 5: Number of SMEs and volume of exports in 2019



Source: Ministry of Industry and Trade/Czech Statistical Office

STRATEGIC OBJECTIVE – SIGNIFICANT PRESENCE OF CZECH SMEs IN FOREIGN MARKETS

Export support for SMEs is an essential component of the development of this segment. A key document covering the export support for Czech businesses is the *Export Strategy of the Czech Republic*⁴², which deals not only with export support, but also with expansion onto foreign markets or the internationalisation of businesses. In accordance with this document, the main focus within the SME segment is on financing instruments, the provision of information and the development of services for exporters or the development of business opportunities. The issue is also addressed by the *Innovation Strategy of the Czech Republic 2019–2030*, especially from

a marketing perspective, which is a necessary part of successful export activities. In this respect, emphasis will be placed on enhancing the Czech Republic’s global prestige in world markets and building up the Czech Republic’s reputation as a modern, stable, trustworthy and innovative partner.

Due to the need for a comprehensive approach, financial support in this area will be supplemented with “soft” measures such as assistance services or business and marketing consulting. In order to preserve or improve their competitiveness, i.e. not only within the EU internal market but also in global competition, SMEs must comprehensively internationalise their economic activities and, in

⁴² This is the *Export Strategy 2012–2020*, including the 2017 update and the *Export Strategy 2021+* that is being prepared.

turn, improve their access to foreign markets. Many SMEs are and – not in the least due to their internationalisation – will be involved in global supply chains, which is related e.g. to cooperation with partners (suppliers and customers) and responsible business behaviour both of the business itself and within its strategy to select suppliers.

The specified measures are governed by general principles that will make it possible for Czech technology companies, to achieve a level comparable to European and global companies, that will support and effectively navigate Czech companies entering such markets, and promote the reputation of Czech products and services in the world⁴³ in terms of foreign PR for the Czech economy and its entities. At the same time, they will help Czech entrepreneurs and investors discover the potential of the various export regions, offer them a helping hand in each of these regions, improve their self-confidence when expanding abroad, or help them navigate

⁴³ Another trend that is important for SMEs is servitisation, i.e. the export of services, either on their own or linked to goods.

different legal environments in foreign markets and take advantage of trends in progressive sectors of the global economy. Last but not least, it is also important to support – through activities and services for entrepreneurs – the diversification of exports, especially towards higher value-added products, the strengthening of the position in the EU and the expansion of exports to third countries. In itself, participation in the lower tiers of global value chains is a limiting factor to further growth in the volume of exports and the creation of domestic value added in exports.⁴⁴

At the same time, it is important to reduce bureaucracy, which must also be borne in mind by export promotion institutions. In this respect, it is crucial to create an environment that will stimulate Czech SMEs in developing their innovation potential and the associated competencies, competitiveness and ability to establish themselves in foreign markets, i.e. to increase the value added and economic profit of Czech companies and to stimulate their global ambitions.

⁴⁴ Forward creation of value added of Czech exports.

Specific objective – Facilitating the operation of Czech SMEs in the EU internal market

A well-functioning EU internal market is important for the competitiveness of SMEs. As part of export support, the Czech Republic has long been striving – at the national and European level – to deepen the EU internal market, eliminate any remaining or newly emerging obstacles and improve the effectiveness of existing instruments that make it possible to make better use of this area. SMEs most frequently benefit from the internal market but they are also often affected by the unnecessary administrative burden (at the European, national or local level), lack of information and other barriers to cross-border provision of services and sale of goods, which is why removing barriers in the internal market should make it easier especially for SMEs to do business. Reducing regulatory burden and improving market access is also one of the three pillars of the *SME Strategy for a sustainable and digital Europe*. Within the EU internal market, in addition to removing barriers to access and the need to further liberalise the internal market, it is also crucial to provide support services for SMEs.

An important resource within support services is the Single Digital Gateway, which aims to create a pan-European electronic signpost to provide citizens and businesses with relevant information, online procedures, assistance and problem-solving services, for example in the areas of business, social security, taxes and more. By interconnecting electronic assistance and information services, the Single Digital Gateway will thus help SMEs both to navigate the EU internal market and to deal with national situations. The Points of Single Contact (PSC) also play an important role, as they provide free information that is needed by the client in order to start a business in the Czech Republic and also anywhere in the EU. Another purpose of PSC is to provide the client with information and contact details for the relevant Czech and EU authority responsible for permitting specific activities. In addition, PSC will pass on applications for a business license or the recognition of professional qualifications to the competent authorities. Clients are thus able to complete all the necessary formalities for starting business in one place.

MEASURE

(CO-)RESPONSIBILITY

- | | |
|--|--|
| <ul style="list-style-type: none"> Implement the measures set out in the Commission communication entitled <i>“Long term action plan for better implementation and enforcement of single market rules”</i>, focusing in particular on the Single Market Enforcement Task-Force (SMET), further promote the mitigation and removal of barriers to access to the EU internal market in the sense of reducing the regulatory burden. | MIT |
| <ul style="list-style-type: none"> Complete the implementation of Regulation 2018/1724 of the European Parliament and of the Council establishing a Single Digital Gateway. | MIT and MI + other ministries responsible for implementing SDG |
| <ul style="list-style-type: none"> Offer SMEs additional services to facilitate their operation in the internal market, in particular the services of the Point of Single Contact, the SOLVIT centre and the Product Contact Point. | MIT |

Specific objective – Diversification of exports of Czech SMEs also outside the EU markets

The issues of eliminating barriers to access to new markets and deepening the binding legal framework for trade relations with non-EU countries are specifically addressed in the *EU Common Trade Policy*. In particular, negotiations on rules for subsidies that distort trade in industrial goods, on the prevention of forced technology transfer and on rules for electronic commerce, including the free movement of data, are crucial for Czech businesses. Through the common trade policy, the Czech Republic continues to participate in negotiating deeper and comprehensive free trade agreements.

This specific objective aims to identify promising opportunities for SMEs in foreign markets outside

the EU internal market and, in turn, to diversify domestic exports and increase opportunities for the internationalisation of SMEs. In the area of state-supported export financing and insurance, several programmes have been prepared that will enable SMEs to obtain financing for their direct export activities or their subcontracts as part of the financing of medium-term and long-term export credits implemented by Czech exporters. The programs are implemented by CEB in cooperation with CMGDB, EGIC and commercial banks. Since global markets are an important source of growth for SMEs, it is essential to provide SMEs not only with financial support, but also with quality information and support services.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Use a new generation of tools (including sharing best practice) that strengthen the permanent presence of Czech businesses in foreign trade, the provision of export opportunities from global markets, including outside the EU, participation in internationalisation activities through centres and the acquisition of competencies (International Centres for Internationalisation, Export Alliances and Clusters, Design Centre, Designers Database, Exporters Database, KET Centres). 	CzechTrade and MIT
<ul style="list-style-type: none"> • Continue to negotiate deeper and comprehensive free trade agreements. 	MIT
<ul style="list-style-type: none"> • Organise foreign trade and incoming missions attended by Czech political representatives and other specialised networking activities abroad, support the activities of intergovernmental commissions and working groups with regard to the internationalisation of SMEs. 	MIT, CzechTrade, OG CR, ministries, Parliament, OPCR
<ul style="list-style-type: none"> • Provide export insurance and financing products for SMEs focusing primarily on non-European markets (export financing and insurance products with state support from CEB and EGIC). 	MF, CEB and EGIC

Specific objective – Improving the ability of Czech SMEs to internationalise their activities and ensuring their permanent presence in foreign markets

An important factor in strengthening the ability of SMEs to enter foreign markets and establish cooperation with foreign partners is the level of entrepreneurial skills that are essential for the internationalisation of activities (e.g. marketing in the digital economy, market research, intercultural and communication skills, cross-border logistics, etc.). For this reason, it is necessary to make sure that SMEs have a sufficient level of export-specific knowledge and skills, as well as sufficient human resources, so that they are able to manage all the processes necessary to expand into foreign markets by themselves. Given that many SMEs may (at least initially) suffer from these shortcomings, it is crucial that the state sets up a support ecosystem for export activities, so that businesses want to innovate, grow and enter new and promising foreign markets and are able to thrive in the EU single market and also in global competition.

Support will continue in order to increase the participation of Czech SMEs in global value chains (GVC) with high value added.⁴⁵ Expansion to new markets abroad is an ideal opportunity for SMEs to enhance their positions and focus on production for end customers. Discovering and gaining end customers is a key prerequisite for increasing the innovation potential of Czech SMEs. Sustainable export performance of business resilient to fluctuations in the economic cycle will be ensured by higher value added and territorial or sectoral diversification. At the same time, businesses participating in GVCs have a wider access to

more sophisticated and affordable imports, new technologies and inputs that may not be available on the domestic market. There is thus a close link between participation in international trade and innovation activity. Businesses that innovate tend to be more actively involved in international trade, and firms participating in international trade are more innovative. Supporting participation in international trade and innovation are thus two sides of the same coin and need to be implemented together. More R&D carried out by SMEs may contribute to greater internationalisation and participation in GVCs. When entering foreign markets, it is also advisable for companies to protect their intellectual property.

Also, businesses must be aware of the opportunities offered by the digital economy and have adequate digital skills that will allow them to participate in cooperation networks, GVCs and e-commerce activities. Therefore, improving SMEs' access to digital technologies and enhancing the businesses' skills for using them is also an essential component.⁴⁶

Another aim is to intensify the promotion of economic interests abroad, which are among the global trends to support economic growth. Economic diplomacy is thus an important priority, especially due to the high degree of openness of the Czech economy, where exports and external economic ties are of key importance. External economic relations are also viewed from the balance of payments perspective, not only as the movement of goods and services across borders.

⁴⁵ Specific measures contributing to a shift in GVC are further addressed within the key area entitled Research, development and innovation.

⁴⁶ These elements are addressed in detail in the key areas entitled Digitalisation, or Workforce, skills and education.

Therefore, the aim is to shift away from the current model of external economic relations, where reexport and indirect export of goods play an important role, towards the model of direct entry or permanent presence in the target markets with own brand and value added. This shift will mean an increase in the direct presence of Czech companies in foreign markets. One possible way to enter promising foreign markets directly is to promote direct ties with end

customers and support the permanent presence of Czech companies in foreign markets. In order to accomplish the objective, it is necessary to expand the range of services both in terms of preparing Czech businesses and in terms of support directly in foreign markets. In addition, new approaches of modern economic diplomacy aimed at guiding SMEs all the way to more distant markets and building a closer relationship with customers are also crucial.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Provide consulting services for SMEs (at all stages of their development) to facilitate their entry and operation in foreign markets, or expert services in business and marketing strategy, design, optimisation of product material ecodesign and other support tools for entry and operation in foreign markets. Furthermore, to provide free industry-specific export advice and consulting with experts operating abroad (CzechTrade Meeting Point, Consulting Days, Design Centre, etc.), including arranging legal advice. 	<p>CzechTrade, CzechInvest and MIT</p>
<ul style="list-style-type: none"> • Support SMEs’ participation in foreign trade fairs and exhibitions, including organising and participating in other foreign events, symposia, seminars and other events. 	<p>CzechTrade, CzechInvest and MIT</p>
<ul style="list-style-type: none"> • Strengthen horizontal cooperation, synergies and transfer of information between state organisational units (or institutions) and actors at the EU level, and strengthen the “no wrong door” principle in implementing services to support the internationalisation of SMEs. 	<p>CzechTrade and MIT</p>
<ul style="list-style-type: none"> • Empower Czech SMEs to protect and enforce intellectual property rights in third country markets – professional services of CzechTrade, FO CzechTrade. 	<p>MIT, CzechTrade and IPO</p>
<ul style="list-style-type: none"> • Support the promotion of SMEs within the project “The Czech Republic: The Country for the Future” and work towards a uniform look of Czech Republic’s exhibitions at international events, incl. developing the Manual for a uniform presentation. 	<p>MIT, MFA and CzechTrade</p>
<ul style="list-style-type: none"> • Through the PROPEA and PROPEA+ project as part of economic diplomacy, provide Czech companies operating in the relevant region or preparing to enter the target foreign market with the services of accredited local experts – with the support of the embassy in the region – who will help them achieve continuity of business relations and address logistics and other problems. 	<p>MFA</p>
<ul style="list-style-type: none"> • Support the development of PROPED Economic Diplomacy Projects and develop the involvement of other ministries and actors in the instrument in order to strengthen the possibilities of offering state services in new promising sectors. 	<p>MFA, CzechTrade and MIT</p>

WORKFORCE, SKILLS AND EDUCATION



BASELINE SITUATION

The Czech Republic and the entire EU are undergoing a number of changes that have an impact on the labour market and the requirements placed on entrepreneurs and employees. Also, innovation and technological progress associated with the digital transition represent a number of new opportunities and areas of business, but adequate attention must also be given to creating the conditions that will make it possible to take advantage of these new opportunities. This requires a suitable set of competencies, including professional technical and digital skills, as well as strategic, managerial, communication, planning, marketing, leadership and also interpersonal skills.

However, the Czech Republic generally suffers from a significant mismatch between the skills of the workforce and the needs of the market, which hampers economic growth and contributes to a relatively low labour productivity compared to

the developed economies. When addressing the issue, it is therefore necessary to be aware of the interconnection between the labour market and the education system and the need for cooperation of the institutions involved at various levels, since the labour market will bring new trends associated with the deepening digitalisation of the economy. That said, the interconnection of the educational and business sectors has so far been weak and has mainly concerned isolated cases or projects. At a time of ongoing transition of the Czech economy towards digitalisation, it will be necessary to reform and support the lifelong learning system and strengthen cooperation between schools and businesses so that employees' skills and knowledge match the needs of a digital and sustainable economy. In addition, it will be necessary to adopt an improved approach in vocational education and training and the higher education system that is based on practice and that promotes

links between schools and businesses. Schools often lack the financial resources to acquire the new technologies needed for teaching, while businesses, on the other hand, lack motivation to cooperate. Another problem that most often prevents schools and businesses from working together is the predominance of small companies within each region, which do not have sufficient capacity for such cooperation. Also, it is equally important to keep teaching methods and forms up to date due to the exponential development of technology.

From the perspective of preparation for the future profession, it is also necessary to take into account society-wide changes. Given the nature of its economy (e.g. a high reliance on the manufacturing industry), the Czech Republic will be very significantly affected by automation in terms of the impacts of I4.0 on the labour market.⁴⁷ Industrial transition leads to the creation of new jobs and new opportunities that require new types of competencies. Within 30 years, automation could replace over 50% of skills in the vast majority of existing professions, representing approximately 3.4 million employees.⁴⁸ According to the OECD, the Czech Republic has the second largest proportion of jobs at risk from automation.⁴⁹ However, SMEs often lack adequate resources to train their employees as compared to large businesses. That is why it is necessary to build up a functional lifelong learning ecosystem, and achieving that requires a joint proactive approach by the state and businesses in the areas of retraining, reskilling

and upskilling. Workforce in all professions (manual and cognitive) but also end customers will need to have digital skills. However, the current educational attainment structure has a rather negative effect on the development of digital technologies. The education system must prepare young people for new future professions and provide them with the right set of skills to adapt flexibly to an ever-changing and increasingly technological landscape in the future. Yet the Czech Republic lags behind in the level of digital skills/the development of these competencies in the business sector in general, but especially among SME employees. While the demand for unskilled workers will decrease, the demand for IT and STEM professionals will grow significantly.⁵⁰ Another reason why a high tension between the supply and demand for digitally educated workforce can be expected is the fact that a growing demand will be generated by the Czech service sectors which still account for a very low proportion of employment and without which a modern economy cannot exist. In order to be competitive in the future, businesses must be able to harness the potential of artificial intelligence and digital tools, such as online marketing, data analysis and process automation, to strengthen their sales capabilities and more effective management.

The importance of soft skills also keeps increasing, which is caused by increasing globalisation, office virtualisation, technology and increasing diversity of society (age, gender, education, ethnicity,

47 World Bank – Czech Republic: Assessment of the SME Policy mix (2019)

48 European Commission – Report on the Czech Republic for 2020

49 OECD – „How technology and globalisation are transforming the labour market“. OECD Employment Outlook 2017

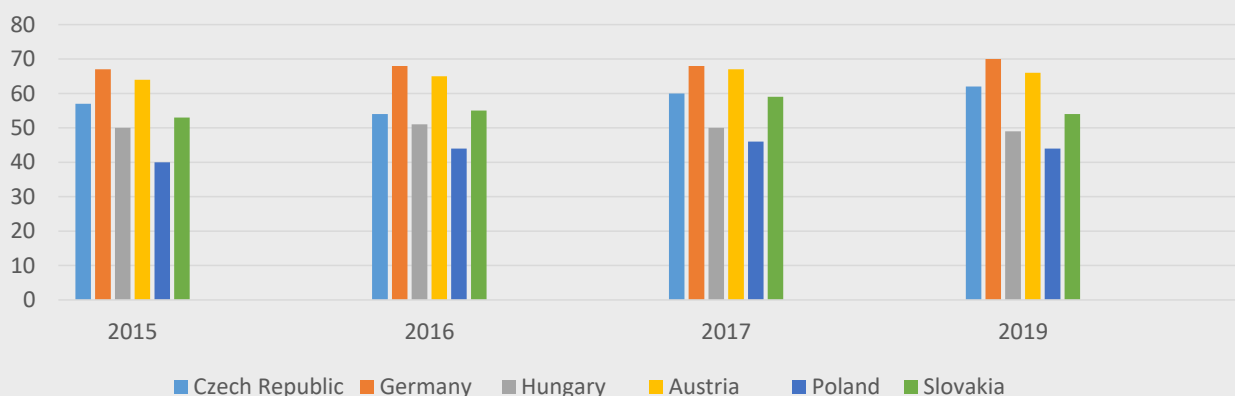
50 World Bank – Manufacturing a startup. A case study of I4.0 development in the Czech Republic (2019); Rejchrt, L. „Impacts of artificial intelligence on the labour market and requirements for lifelong learning.“ Artificial intelligence and opportunities in the Czech Republic. Aspen Institute Central Europe (2019).

etc.).⁵¹ It is important to focus on adding the elements of transferability, multidisciplinary and interdisciplinary skills, including language skills, into degree programmes.

⁵¹ Dall'A-mico E., Verona S. – Cross-country survey on soft skills required by companies to medium/high skilled migrants. Methodological approach for a common framework of Soft Skills at work (2015)

One of the possibilities for graduates to find a job in the labour market is to start a business. While the field of entrepreneurship education has theoretically become a mandatory part of the Czech education system, it still faces a number of problems such as the lack of qualified teachers, ineffective teaching methods, the absence of practical elements of business, etc.

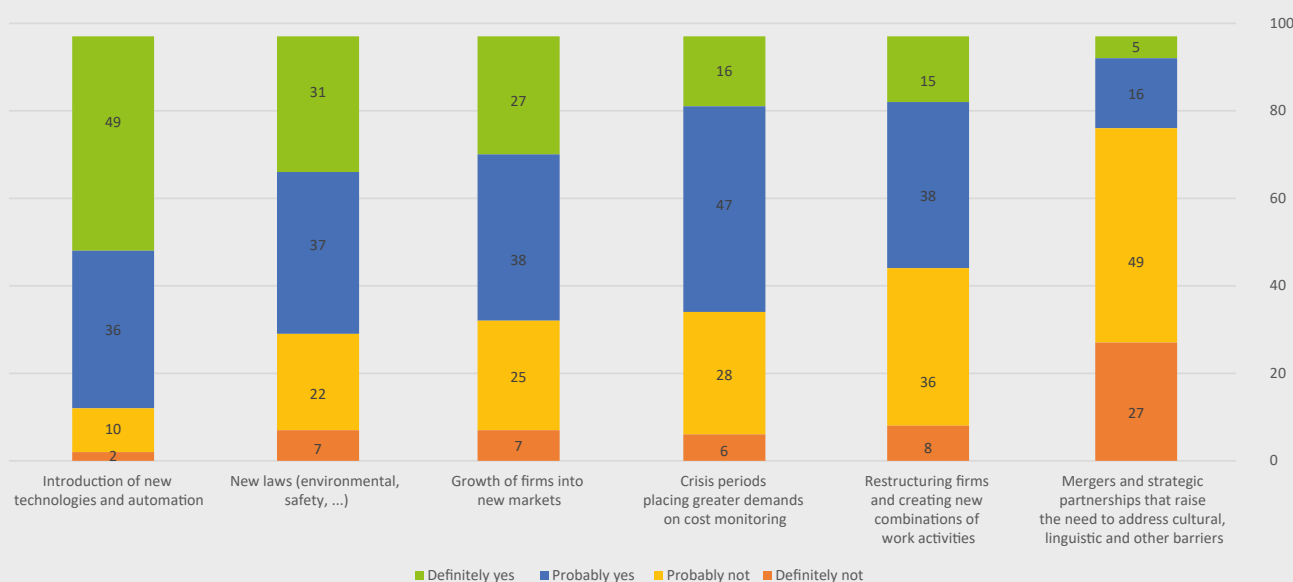
Chart 6: Level of digital skills in selected countries of the Central European region



Source: Eurostat⁵²

⁵² See data available at: https://ec.europa.eu/eurostat/cache/metadata/en/tepsr_sp410_esmsp2.htm

Chart 7: Main trends in SMEs' requirements for educational activities in 2021–2027



Source: Ministry of Industry and Trade⁵³

⁵³ See the *Analysis of the market situation and specification of suitable forms of support for the purposes of preparing priority 1 of OP TAC 2021–2027* (2020)

STRATEGIC OBJECTIVE – DEVELOPING THE SKILLS OF PUPILS AND STUDENTS IN ACCORDANCE WITH LABOUR MARKET REQUIREMENTS

It will be crucial to improve the quality of education and training systems, among other things by supporting technical, digital or soft skills, by building the capacity of pupils and students so that a graduate entering the labour market has been prepared by the educational process to be readily employable, to be able to adapt flexibly

to new conditions and respond to new trends and tendencies, and to be ready to further develop and learn. These issues are addressed by the document entitled *Key Directions for Education Policy of the Czech Republic until 2030+* and the *Strategy for Education Policy of the Czech Republic until 2030+*.

Specific objective – Setting up and strengthening an appropriate form of cooperation between schools and businesses

The aim is to optimise the quality of graduates and the requirements of employers who require ever greater knowledge and skills, especially in sectors where technological progress is rapid and, consequently, schools are not able to keep up and adapt their school educational programmes to the current needs nor do they have the funds to secure modern technologies. Supporting cooperation between schools and businesses and interconnecting education and employers is thus one of the ways to help ensure that graduates' competencies, skills, knowledge and abilities match the requirements of the labour market, especially in a situation where Czech businesses

experience a significant shortage of qualified experts. Maximising students' involvement in work teams in businesses enhances the quality of teaching as a result of the intensive contact between the student and experts from professional practice.

In the context of ongoing digitalisation, robotisation and automation, ensuring the availability of a sufficient number of qualified employees, i.e. investing in their training, is one of the top priorities of employment policy not only in the Czech Republic but also in the EU. The key is to create a truly comprehensive system.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Strengthen the cooperation between companies, especially SMEs, and schools through promoting and organising seminars/webinars on this issue with the participation of MIT, MEYS, MF and ASMEC as well as other economic partners. 	MIT, MEYS and MF
<ul style="list-style-type: none"> • Support the organisation of students' work placements and internships in businesses. 	MEYS
<ul style="list-style-type: none"> • Promote the creation of shared workshops, shared classrooms and training centres for the teaching of technical subjects and youth education in the field of I4.0. 	MIT and MRD
<ul style="list-style-type: none"> • Support the instructor at the practical training provider (education, certification, methodological materials). 	MEYS
<ul style="list-style-type: none"> • Strengthen individual (career) counselling and support links between students and specific businesses. 	MEYS

Specific objective – Improving the quality, efficiency and relevance of preparation for future occupations

The Czech Republic is aware of the increasingly important need to develop and support digital skills, which are very important in terms of the preparedness of the workforce for the consequences of the I4.0 and the development of opportunities to control new technologies. It is due to the advent of automation and robotisation that a mismatch is already being felt in terms of quality skills, especially in the digital industry. It is therefore necessary to invest in new competencies, especially in the area of greater professional technical skills and digital skills, which workers are expected to need to automate existing mechanical tasks. Both the Czech Republic and the strategy as such strive to predict future labour market needs (including future competencies), introduce systemic innovative elements in further education, and develop the area of digital competences, in accordance with other key documents, including the *Strategic Framework for Employment Policy until 2030*, the *Strategy for Education Policy of the Czech Republic*

until 2030+, the *Action Plan for Work 4.0 or Digital Czech Republic*.

In addition to building technical and digital skills within the education system, it is also necessary to focus on soft skills. Skills such as creative and critical thinking, presentation and communication are often crucial not only in job interviews for employees, but are also very much needed by individuals who are considering starting a firm, and by existing entrepreneurs who would like to expand their business, innovate or penetrate foreign markets. For the development of general and vocational skills, it will be necessary to ensure a higher degree of interconnection between formal and non-formal education, including incorporating modern teaching methods and technologies.

At the same time, it is necessary to strengthen the results in entrepreneurship education in order to improve the perception of entrepreneurship. The

aim of entrepreneurship education is to promote entrepreneurship and the entrepreneurial spirit, i.e. abilities, attitudes, skills and knowledge that will make it possible to find, create and develop a business plan, turn ideas into actions and eliminate possible risks. In this respect, it is important to intensify the interconnection between educational theory and practice. It is the above cooperation with businesses that will help bring educational curricula closer to the real world and, in turn, make it easier for graduates to

find suitable employment and, correspondingly, for businesses to find qualified workers.

Promoting entrepreneurship education is one of the EU's priorities, as it is one of the key areas that can be used to support economic growth and job creation. Also, an important EU document on this topic is the *Entrepreneurship Action Plan 2020*, which defines entrepreneurship education as one of three key areas that can support economic growth and job creation.

MEASURE

(CO-)RESPONSIBILITY

- | | |
|--|------|
| <ul style="list-style-type: none"> • Implement the measures set out in the <i>Strategy for Education Policy of the Czech Republic until 2030+</i> with a focus on digital and financial literacy, soft skills, critical and creative thinking and STEM skills. | MEYS |
| <ul style="list-style-type: none"> • Promote the availability of modern equipment in schools and make better use of the potential of information and communication technologies in order to enable more efficient and individualised learning, and teaching and research methods. | MRD |
| <ul style="list-style-type: none"> • Support the development of entrepreneurship and entrepreneurial skills in schools. | MEYS |
| <ul style="list-style-type: none"> • Support the creation and development of higher-education degree programmes that reflect new teaching methods, digital literacy, students' entrepreneurial competencies and the introduction practice into teaching. | MEYS |

STRATEGIC OBJECTIVE – PROVISION OF FURTHER EDUCATION, ESPECIALLY IN KEY SKILLS

The high penetration of technological innovations into social and economic life, both into production processes and services, brings about wider social changes, which are expected in many areas of society including the labour market. These trends bring potential risks in the form of job losses or difficulties in accessing employment for some groups of people with lower digital literacy or competencies that do not

meet the need to respond adequately to ongoing changes. It is therefore necessary to provide support for lifelong learning and continuing professional training as required by small and medium-sized employers. Adaptation of the workforce to changing conditions – especially the changing structure of professions and qualification requirements of the labour market – is a necessary factor for SMEs' success, i.e. for

improving their competitiveness and achieving a shift towards a higher value-added economy.

The issue of further education at the national level is covered by the *Strategic Framework for Employment Policy until 2030* and the *Action Plan for Work 4.0*, which contains specific measures for adaptation to technological change and the development of workers' digital skills. The development of skills for smart specialisation, industrial transition and entrepreneurship is also

an integral part of the *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021–2027*. The aim is to improve the innovation performance of businesses and, in turn, contribute to improving the Czech Republic's competitiveness, which will be based on the use of knowledge and innovation rather than on cheap labour. At the same time, it is also necessary to build managerial skills that take advantage of productivity-enhancing technologies and to invest in human capital ready for I4.0.

Specific objective – Providing further training for employees and businesses

It is necessary to take into account the conditions existing in the labour market in connection with I4.0, the digitalisation of labour and markets, which places increased demands on the labour force. This will create the conditions for lifelong learning and further professional training supported by small and medium-sized employers. The Czech workforce needs ongoing training so that workers can improve their skills and take advantage of new professional opportunities. Support will focus on further education, training and the development of specific consulting services aimed at addressing the problems currently faced by SMEs. In the case of a functional system to support further education, the proposed consulting activities will guide SMEs

to choose appropriate training courses, i.e. to support training for their employees. Businesses will thus be able to improve the quality of their human resources and get better prepared for the societal changes associated with the transition to the digital economy. By improving and deepening their qualifications, i.e. by acquiring key, professional and digital competencies, the qualifications of the workforce will improve and SMEs' competitiveness will increase. Support for improving managerial skills within SMEs, which show a correlation with productivity, is also crucial. At the same time, it is necessary to focus on improving their knowledge and skills for further development and operation in foreign markets.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Promote the recognition of competences acquired in different contexts, which will enable individuals to have their competences recognised and to acquire full or, where relevant, partial qualifications. 	MEYS
<ul style="list-style-type: none"> • Create lifelong learning programmes that can effectively reflect the needs of the labour market, and create programmes/courses for universities of the third age. 	MEYS
<ul style="list-style-type: none"> • Ensure sufficient financial support for SMEs in order to further educate employees on key competencies. 	MLSA
<ul style="list-style-type: none"> • Develop specific consulting services for SMEs and start-ups/ scale-ups (business, marketing, legal, managerial, etc.) with the involvement of the newly-created national and regional innovation infrastructure. 	MIT and CzechInvest
<ul style="list-style-type: none"> • Support educational institutions that offer further education for employees and businesses and ensure adequate quality in the provision of education services. 	MLSA

Specific objective – Improving the level of digital skills in the business sector

The aim is to intensify domestic SMEs' adaptation to new technological changes through practical expertise and skills in digital technologies and, in turn, address the lack of digital skills at all levels and the growing number of vacancies for ICT professionals. In this respect, it is not only about the ability to use these technologies, but also about innovating them and developing their use

in order to keep up with technological progress. The actual transition to digital technologies or sustainability requires a sufficient number of qualified workers, but also experienced managers, which is still the most significant problem for many SMEs.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Support the training of employees in connection with the introduction of new technologies in firms. 	MLSA
<ul style="list-style-type: none"> • Support innovation infrastructure actors that can contribute to the development of skills for smart specialisation, industrial transition and entrepreneurship (e.g. science and technology parks, innovation centres, Digital Innovation Hubs, etc.). 	MIT



RESEARCH, DEVELOPMENT AND INNOVATION

BASELINE SITUATION

Growing innovation-based businesses are key to a sustainable model of economic growth. According to the European Innovation Scoreboard, the Czech Republic's innovation index for 2019 is 84.3, i.e. below the EU average. The Czech Republic's efforts to join the club of the most economically developed countries are still hampered by the low innovation performance of domestic businesses – especially SMEs, whose innovation performance stagnated or weakened between 2010 and 2017, show inadequate in-house research and innovation activities by international comparison. Despite the fact that total expenditure on research and development has been growing for a long time in the Czech Republic, the Czech Republic still reports slightly below-average gross domestic expenditure on research and development in the EU context, namely 1.94% of GDP in 2019. In the Czech Republic, large businesses tend to dedicate

a higher share of their revenues to research and innovation, namely 0.8%, while businesses with 10–49 employees only 0.3%, and businesses with 50–249 employees 0.5%.⁵⁴ Overall, around 70% of private sector R&D expenditure comes from large businesses⁵⁵, which means that SMEs account for less than a third of private R&D investments.⁵⁶ In addition, most of SMEs' R&D expenditure is implemented in medium- and low-tech sectors.

The low number of domestic businesses that are able to push the technological boundaries in their respective fields in combination with the fact that the top foreign firms operating in the Czech Republic have their research and strategic facilities located mostly outside the

⁵⁴ World Bank – Productivity and Innovation in the Czech Republic: A Firm-Level Perspective (2019)

⁵⁵ Most innovations are driven mainly by large foreign firms operating in the Czech Republic.

⁵⁶ CZSO (2019), available at: <https://www.czso.cz/csu/czso/2-ukazatele-vav-za-podnikatelsky-sektorbqun447z8y>

Czech Republic cause low innovation demand in the segment of higher-order innovations. In addition, many domestic companies operate at low tiers of supply chains. Czech SMEs are thus characterised by inadequate investment in higher value-added production through innovation or technology development, which results in poorer performance in terms of productivity, position in value chains and the introduction of new technologies. Furthermore, within the Czech Republic as a whole, there are still significant regional disparities in the dynamics of research and innovation activities.

Between 2013 and 2019, the number of patent applications filed and utility models registered by SMEs declined. The number of patents of Czech businesses lags much farther behind developed European countries than the number of patents of the Czech public research sector.

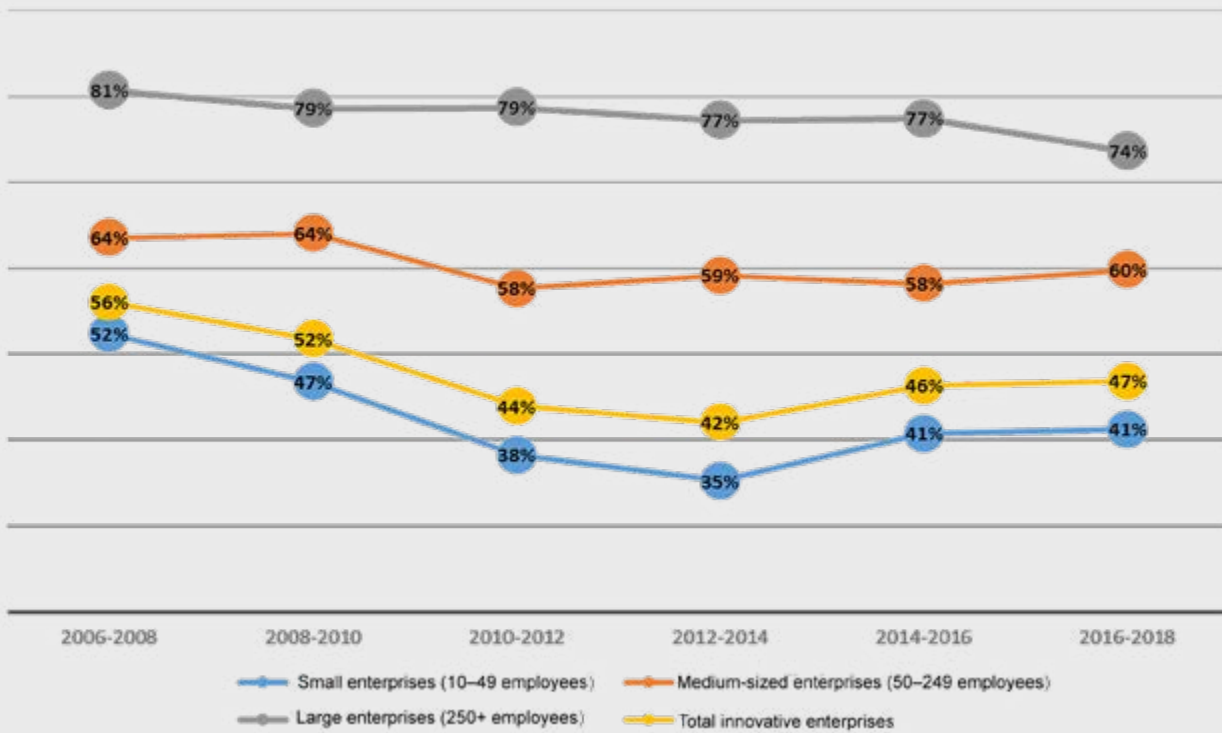
In addition, collaboration between SMEs and other companies or research organisations is underdeveloped in the Czech Republic. In addition, cooperation between businesses and academia is haphazard rather than systematic, and higher education institutions and research organisations

do not systematically reflect the needs of industry in their activities – they lack the regulatory or financial incentives to do so. The unsatisfactory situation is made even worse by the high rate of dependence of Czech corporate R&D&I on the decisions of foreign parent companies that scarcely give their Czech subsidiaries sufficient autonomy in the area of cooperation with the academic sector in the Czech Republic, and if they do, then only under conditions that unilaterally favour the multinational companies.

Despite significant advancement in recent years and improvements in productivity and research quality, the domestic research system remains relatively closed to international cooperation. In terms of participating in directly managed EU programmes to support R&D&I and international cooperation projects, Czech SMEs have room for improvement.

Also, Czech technology start-ups face specific problems, such as complicated procedures for establishing spin-offs, inefficient technology transfer centres, and a weak incentive structure for the commercialisation of ideas.

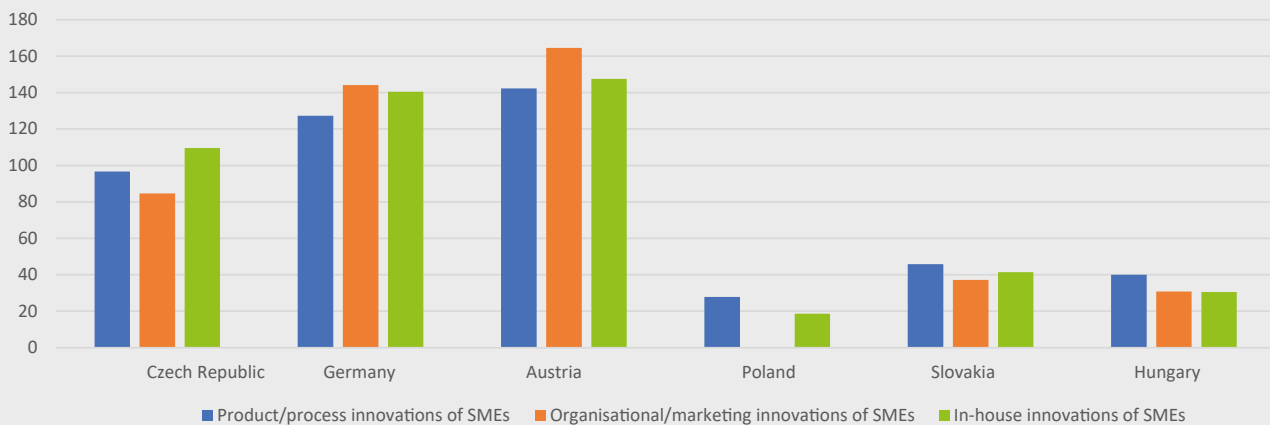
Chart 8: Innovation activity of businesses in the Czech Republic



Source: Czech Statistical Office⁵⁷

⁵⁷ See the *Innovation activities of businesses*, available at: <https://www.czso.cz/csu/czso/inovacni-aktivita-podniku-20162018>

Chart 9: Index values of selected indicators of the European Innovation Scoreboard 2020 for selected countries of the Central European region



Source: European Commission⁵⁸

⁵⁸ See the *European Innovation Scoreboard 2020*

STRATEGIC OBJECTIVE – FULLY DEVELOPED INNOVATION CAPABILITIES OF SMEs

The purpose of the strategic objective is to support the innovative capabilities of domestic SMEs so that they can move within global value chains towards the production of higher value-added products or the provision of higher value-added services. In order to accomplish the objective, it is necessary both to support SMEs themselves, and to set up an appropriate environment that will help accelerate their innovation activities. Therefore, as part of support for domestic SMEs, emphasis will be placed on increasing investments in research and development, i.e. on developing their innovative capacity, in combination with systemic measures (especially in terms of eliminating barriers to business growth) that will lead to improved research performance. In addition, account will be taken of the need to establish knowledge channels and set up systematic cooperation between the business sector and academia in order to strengthen innovation potential and enable knowledge and technology transfer and, in turn, to eliminate obstacles hampering the development of a fully functioning innovation ecosystem.

The proposed measures thus aim both to develop the system environment and, at the same time, to support specific activities, which should bring synergies. The implementation

of specific activities will lead to generating a critical mass of real research and innovation results, and direct benefits for their creators, for the development of the economy and also for the dissemination of good practice. In the long term, the development of a favourable system environment accelerates the innovation activities of businesses, and the existence of advanced infrastructure and services – combined with the consistent implementation of the RIS3 strategy at the national and regional levels – will ensure the long-term sustainability of the newly-set processes and activities and their benefits for businesses and society.

At the same time, the objective and the various measures are in line with key national strategic documents, i.e. with respect to strengthening businesses' research and innovation activities, protecting intellectual property and improving the ecosystem for the development of innovative enterprises. Specifically, these include the *National Research, Development and Innovation Policy of the Czech Republic 2021+*, the *National Research and Innovation Strategy for Smart Specialisation of the Czech Republic 2021–2027* and the *Innovation Strategy of the Czech Republic 2019–2030*.

Specific objective – Intensifying research, development and innovation activities of SMEs

The key is to ensure adequate funding for innovation activities in order to increase the share of SME innovators and also to take advantage of the high integration in global value chains and

aim for higher value added through increasing productivity. Emphasis will also be placed on implementing key technologies and other hi-tech fields and on improving SMEs' awareness of the

importance of developing an intellectual property strategy that aims to protect investments in research and development and increase growth capital.

The aim of the implemented measures will be mainly to encourage SMEs towards innovation activities and the implementation of breakthrough innovations with a high economic potential, introduce new business models, achieve a shift in value chains, increase intellectual property protection and increase revenues from patents and licenses. Compared to the previous period, the measures should be oriented more towards supporting the development of new technologies, including digital technologies,

which will be increasingly applied not only in industrial production, but also in other sectors and in everyday life. Also, efforts will be made in the future to focus support more on those areas that meet the current needs of the business sector and the needs of society (linkage to the research and innovation specialisation domains under the National RIS3 Strategy and societal challenges). In addition, support for strategic technologies is also an integral part. The measures specified can be categorised into innovation activities implemented directly by SMEs, support measures to assist in innovation activities, and activities to support the involvement of SMEs in specific types of projects and activities that increase their innovation potential.

MEASURE	(CO-)RESPONSIBILITY
• Support SMEs in the research and development of new products, materials, technologies and services.	MIT and TA CR
• Support the development of specialised software (e.g. for computer security, simulation, monitoring, computer vision, working with big data – Big Data Analytics, 3D printing, etc.)	MIT and TA CR
• Support the introduction of product, organisational, process and marketing innovations in SMEs.	MIT
• Support the protection, use and enforcement of intellectual property in SMEs.	MIT and TA CR
• Support SMEs' participation in international projects and consortia (e.g. EU programmes).	MEYS, TA CR and MIT
• Create an instrument for financing projects of Czech SMEs that have received the EIC Seal of Excellence.	TA CR and MIT
• Support the creation of projects for cooperation between SMEs and large firms and multinational companies in order to strengthen links between businesses as a potential for knowledge and technology transfer.	MIT and TA CR

Specific objective – Creating an advanced innovation ecosystem based on domestic R&D

Creating a functioning innovation system is an essential prerequisite for improving the innovation performance of firms. Therefore, support will focus on systematic cooperation in innovation and on deeper participation of SMEs in cooperation networks (including the research and public sectors). It is necessary to provide domestic SMEs with unrestricted access to modern infrastructure for testing R&D results in terms of their applicability to production. At the same time, it is necessary to ensure that the R&D results match the needs of Czech businesses, including SMEs, and are in line with the priority areas set out in the RIS3 Strategy.

The main goal of the measures implemented is to improve the quality of the Czech innovation

ecosystem for Czech SMEs and to ensure the most favourable conditions for the development of their innovation activities. A sub-goal is to increase the number of successful (progressively growing) start-ups/spin-offs that were created on the basis of using research know-how from public research organisations (research organisations, higher education institutions, etc.) and also to simplify the commercialisation of R&D results in practice. The measures will thus be aimed directly at creating and developing an innovation “ecosystem”, i.e. in favour of the interconnectedness of hitherto individual activities or solitary institutions, with a characteristic emphasis on linking the academic and business environments to support knowledge and technology transfer.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Support collaboration and knowledge transfer between research institutions/academia and businesses in priority sectors.⁵⁹ 	MEYS, MIT and TA CR
<ul style="list-style-type: none"> • Support the building and development of infrastructure for R&D and innovation of SMEs, the testing and verification of technologies in the business sector, e.g. in the field of disruptive technologies, “Makers workshops”, test-labs, etc. 	MIT
<ul style="list-style-type: none"> • Extend the reach of technology development services and prototyping tools through partnerships with intermediaries and university-based technology transfer centres. 	MIT and TA CR
<ul style="list-style-type: none"> • Support and promote the internationalisation of Czech SMEs and research organisations through participating in activities of the Enterprise Europe Network (EEN) and using its tools, including the EEN database of business opportunities. 	TC CAS
<ul style="list-style-type: none"> • Support innovative entrepreneurship and provide information on Key Enabling Technologies and priority sectors (e.g. cultural and creative industries). 	CzechTrade
<ul style="list-style-type: none"> • Support cooperation between SMEs and designers. 	CzechTrade

⁵⁹ E.g. in terms of strengthening the functioning of technology transfer centres at universities. Strengthen the incentive system for universities to motivate them to set up spin-offs and carry out contract research.

DIGITALISATION



BASELINE SITUATION

Digitalisation and the advent of new technologies change entire value chains and bring huge opportunities for SMEs to increase productivity or create jobs and new professions, but they also put pressure on the flexibility of modern industrial production and place increased demands on cyber security and interdisciplinary approach. This issue is closely connected with I4.0, which brings fundamental changes not only to industrial production, but also to services. In addition, the digital economy offers new opportunities for reducing costs through the creation of new business models. However, the adoption of digital technologies remains a challenge, especially for small and micro enterprises. It is thus necessary to address the digital gaps between businesses not only through supporting digital technologies, processes innovation or organisational changes, but also through developing digital skills.

Alongside large businesses, SMEs are currently the driving force behind the rapid development of technologies, and are thus becoming an important link in the interaction between new technologies and society.⁶⁰ For their competitiveness and development, it is important to identify to the largest possible extent any trends that are associated with the advancing digitalisation and have been already affecting today's global economy. However, large companies in the Czech Republic are significantly ahead of SMEs in the use of digital technologies, because SMEs often lack information and awareness of the benefits of digital technologies or technological possibilities, and the degree to which digital tools are used in SMEs' business activities is generally low in the Czech Republic. Also, the adoption of these technologies takes place on an ad-hoc basis rather than based on a formal (or informal) strategy.

⁶⁰ I4.0 Initiative

Key technologies include mainly robotics, 3D printing, artificial intelligence, machine learning, the Internet of Things (IoT), cloud, digital platforms, automation, big data and e-commerce. Since these new digital technologies are also spreading in the Czech Republic, they play a crucial role in changing the production processes and methods. The Czech Republic is specific in that its industrial production accounts for a traditionally high proportion of the overall economy of the country, with the automotive industry being the most important industry in terms of both production and employment. According to the International Federation of Robotics, the automotive industry ranks first in the world rankings of the number of industrial robot installations, closely followed by the production of electrical equipment and electronics, and mechanical engineering.⁶¹ Overall, it can be concluded that the relatively high and still increasing use of robots in the Czech Republic supports its ability to use the automation of production processes over time.⁶² It can be expected that technological changes will also have significant effects in this sector. In the event of a decline in the demand for Czech industrial products, SMEs in the industrial sector would be the first to be affected, because the vast majority of them act as subcontractors. Robotisation itself is already an important component of the Czech economy.

However, SMEs need incentives to use artificial intelligence, high-performance computer systems, improve their cyber security or introduce digital technologies in business. It is also important to secure access to infrastructure

and services within test and pilot lines in order to quickly verify the feasibility of potential digital innovations.

For SMEs, one significant reason for the relatively slower transition to digital technologies is the general lack of awareness and information (especially among top management) about the technological, organisational and business opportunities for the practical use of digital innovations for their rapid economic growth. The information barrier is exacerbated in the case of small businesses, whose management has neither the time nor the resources to search through the vast number of digital products and services in the market. This may be due to a lack of successful business cases and good practice examples. It is therefore important to promote and highlight the competitive advantages of digital solutions among local companies and SMEs.

In order to accomplish the objectives relating to the digitalisation of SMEs, good coverage of the Czech Republic with high-speed Internet is also a crucial prerequisite. However, the situation in the construction and modernisation of high-speed electronic communications networks in the Czech Republic does not currently satisfy these development trends.⁶³ In order to satisfy future connectivity needs, it is necessary to invest in very high capacity networks (i.e. fibre optics).⁶⁴ The digital transition of Czech SMEs will require high-speed Internet access with a transmission speed of at least 1 Gbit/s.

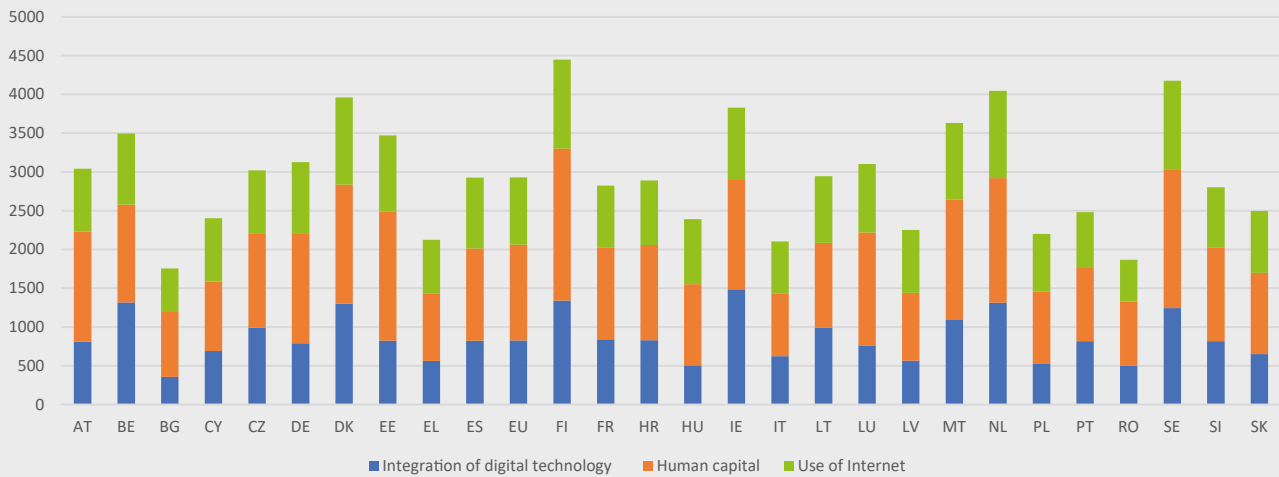
61 International Federation of Robotics. World Robotics (2019)

62 World Bank – Czech Republic SME Assessment Report (2019)

63 Action Plan 2.0 to implement non-subsidy measures to support the planning and construction of electronic communications networks

64 European Commission – Country Report Czech Republic 2019

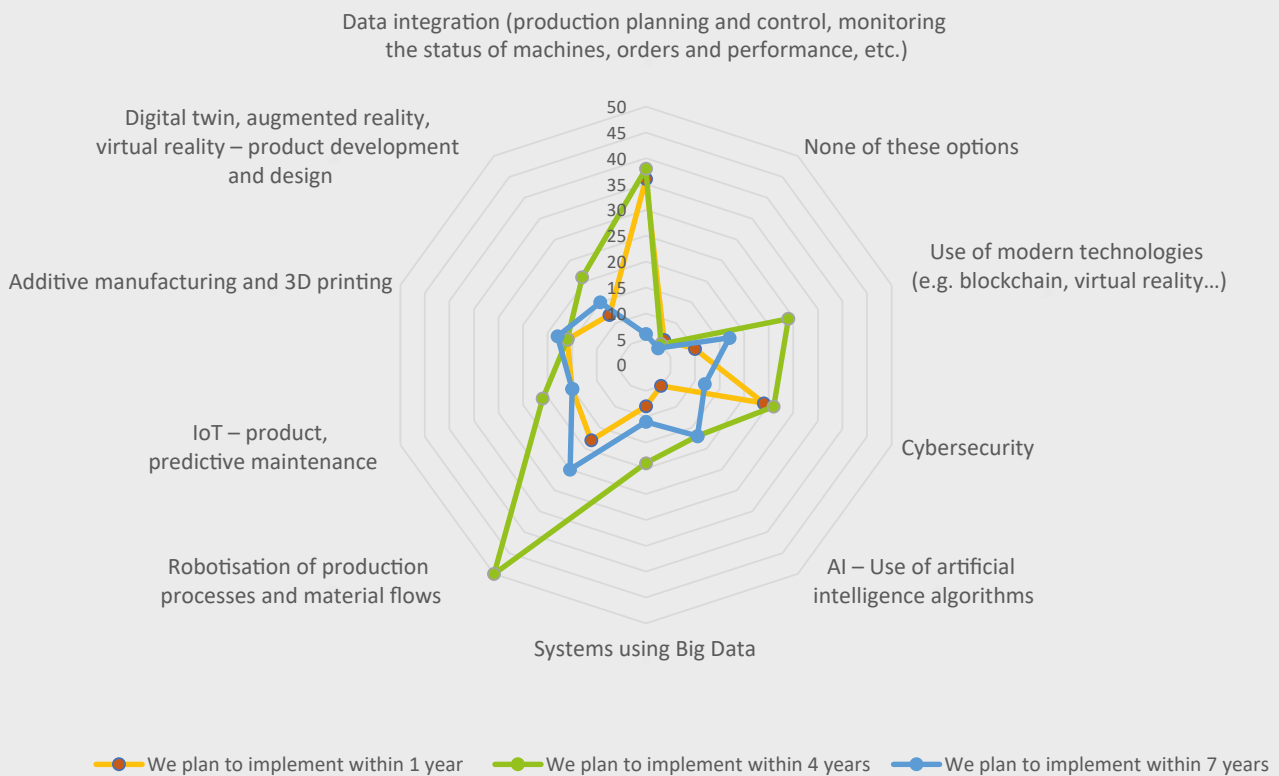
Chart 10: Selected indicators within the Digital Economy and Society Index



Source: European Commission⁶⁵

65 See the *Digital Economy and Society Index 2020*

Chart 11: Survey of SMEs' planned investments in digitalisation in 2021–2027



Source: Ministry of Industry and Trade⁶⁶

66 See the *Analysis of the market situation and specification of suitable forms of support for the purposes of preparing priority 1 of OP TAC 2021–2027* (2020)

STRATEGIC OBJECTIVE – DIGITAL TRANSITION OF SMEs IN THE CZECH REPUBLIC

The main aim is to facilitate the process of SMEs' transition to the full use of the rapidly developing digital economy and society, thus ensuring or improving their competitiveness. It is therefore essential to provide such conditions for SMEs that will allow them to take full advantage of digital innovations and maximise their growth potential in order to create higher value-added products, processes and services. Special attention will need to be paid to the creation and development of highly digitised businesses. A key prerequisite for and integral part of the interventions to be implemented is to improve knowledge and awareness of new digital possibilities, i.e. that the support offered will focus on expanding digital technologies, including financial, technical and professional assistance.

The importance of digitalisation (or digital transition) as a key development priority for the Czech Republic is underlined by its inclusion in the *Innovation Strategy of the Czech Republic 2019–2030*, which is further detailed in the policy document entitled *Digital Czech Republic*, in which individual measures are implemented both within the public sector and towards businesses, especially in terms of their involvement in the use of digital business tools. The fact that SMEs play a key role not only in shaping the digital economy,

but also in using digital technologies (especially in increasing the efficiency of production processes, the ability to innovate products or business models) is also reflected in the *SME Strategy for a sustainable and digital Europe*, which focuses, among other things, on empowering SMEs to reap the benefits of the digital transition, and which considers investments in data infrastructure or facilitating cross-border data interoperability to be of key importance.

The proposed measures are based on the specialisation priorities of the Czech economy, and they will allow SME to accelerate the process of their adaptation to the conditions of the digital economy, create the conditions for increasing data use and facilitate the choice of the right digital business strategy. At the same time, it will be ensured that SMEs are able to fully benefit from digital innovations and all other rapidly developing technological areas and, in turn, exploit the potential of breakthrough digital technologies across the full range of their activities. However, the measures will also focus on expanding access to high-speed Internet so that all citizens and businesses have high-quality and reliable access through very high-capacity networks, which are a necessary prerequisite for digital transition.

Specific objective – Raising public awareness of the benefits of the digital transition

For the implementation of advanced digital technologies to be successful in the Czech Republic, it is necessary to raise public awareness of the benefits of the digital transition. The aim is thus to eliminate the information barrier faced by many SMEs, as they miss out on the benefits

of the deployment of digital technologies in business processes and production. The target group should include primarily SMEs, especially in industries that lag behind in the implementation and use of modern technologies.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> Promote successful business cases of the deployment of I4.0 technologies by Czech companies that will show how these specific technologies improve productivity and affect competitiveness.⁶⁷ 	MIT
<ul style="list-style-type: none"> Create a marketplace where industry representatives with their digital problems/topics meet with students or start-ups that will address those problems.⁶⁸ 	CzechInvest

⁶⁷ In this regard, the role of SMEs' umbrella organisations at national and regional level is important.

⁶⁸ It is also possible to organise competitions focusing on data and data sharing. The competition will encourage industrial businesses to gather and share data on their industrial facilities and system performance, and they can share test facilities and sites with researchers addressing tasks to demonstrate their technological solutions.

Specific objective – Increasing the use of digital tools and new technologies in SMEs' business activities

In connection with the need to improve the digital level and accelerate the digital transition of SMEs, it is necessary to focus on the integration of digital technologies, because the number of businesses that use data-based technologies remains rather limited. Support will therefore focus on speeding up the pace of introduction of digital tools among SMEs and taking advantage of the benefits of digital solutions in order to improve productivity, profitability and approach new customers. Thanks to the digital technologies implemented, businesses will be able to make better decisions and predict future trends, reduce labour costs, create more individualised solutions for their customers and, ultimately,

more easily expand abroad. The development and importance of "disruptive technologies" that transform production processes and mechanisms keeps increasing not only in the Czech Republic, but throughout the EU. Therefore, it is crucial to introduce digitalisation in SMEs – including the necessary process analysis and the subsequent investment support for the deployment of digital solutions – as well as to support projects, especially in areas related to artificial intelligence, process automation, robotics, HPC technology, cyber security and large data processing. The related issue of digitalisation in research and development is primarily addressed in the relevant chapter.

MEASURE

(CO-)RESPONSIBILITY

- | | |
|---|-----|
| • Support SMEs in introducing and using digital tools and new technologies in their business activities (automation, AI, robotisation, machine learning, augmented and virtual reality, business intelligence, e-commerce, etc.). | MIT |
| • Support SMEs in using and interconnecting ICT infrastructure (e.g. data centres, HPC technology, etc.) that is required in order to fulfil the principles of I4.0, in accordance with the trend of large data processing and use. | MIT |
| • Support efforts to increase cyber security of systems and technologies in SMEs, incl. data retention. | MIT |

Specific objective – Ensuring the functioning of the Digital Innovation Hubs network to support SMEs

Digital Innovation Hubs will stimulate the widespread use of artificial intelligence, high-performance computing (HPC) and cyber security, as well as other digital technologies in industry, especially towards SMEs. These centres will thus act as intermediaries between SMEs and higher education institutions/training providers, and incubation activities will help SMEs to become part of data-based ecosystems. These are points of single contact that help SMEs become more competitive in terms of their business/production processes, products and services that use digital technologies, namely through providing access to technical knowledge and experiments so that

SMEs can test the technologies before investing (i.e. test before invest). It will also include innovative services such as financial consulting, training and skills development, as necessary for a successful digital transition.

The EU member states play an important role in selecting the Digital Innovation Hubs, and the cooperation programme for these centres will take place within a network that will be gradually established in the Czech Republic and subsequently interconnected within the EU. The centres' activities will also be complementary to the Digital Europe programme.

MEASURE

(CO-)RESPONSIBILITY

- | MEASURE | (CO-)RESPONSIBILITY |
|--|---------------------|
| • Build up a national network of Digital Innovation Hubs, enable their integration into the European network and ensure their further development in order to provide services for SMEs. | MIT |
| • Support the functioning of the Digital Innovation Hubs in order to improve professional digital knowledge and skills at both management and staff level. | MIT and OG CR |
| • Facilitate the participation of Czech SMEs and operators of Digital Innovation Hubs in the Digital Europe programme. | MIT |
| • Carry out awareness-raising and information activities about the services provided by the network of Digital Innovation Hubs and the possibilities of financial support from national and European programmes to support digital transition. | MIT and CzechInvest |

Specific objective – Good-quality digital infrastructure and high-speed Internet connection

For the overall digital transformation of Czech SMEs, it is crucial to enable high-speed Internet access via very high capacity networks with a transmission speed of at least 100 Mbit/s and with the option to increase the speed up to 1 Gbit/s for all inhabitants, and with at least a gigabit speed (symmetrically) for entrepreneurs (not only SMEs), commercial companies and key socio-economic actors – this will also ensure that the strategic objectives set at the European and national levels are accomplished. The aim is to ensure adequate development of this infrastructure, which will make it possible to effectively implement business plans, as evidenced by the fact that high quality, fast and

robust Internet connection is a condition not only for Czech companies but also for foreign investors entering the Czech Republic, and for establishing scientific and research centres. The wide availability of internet connection via very high-capacity networks will also allow the development of new types of business activities and the use of new digital modern services and products. The measures thus aim to provide the lacking internet access via very high-capacity connection, and improving the availability of high-speed internet access for all Czech households, businesses and major socio-economic actors will significantly increase the potential for their full integration into the digital economy.

MEASURE

(CO-)RESPONSIBILITY

- Support the modernisation or expansion of existing infrastructure, and the establishment of new networks for high-speed Internet access via very high-capacity networks based mainly on fibre optics, thus providing connectivity for households and socio-economic actors, including SMEs.

MIT

LOW-CARBON ECONOMY AND RESOURCE EFFICIENCY



BASELINE SITUATION

Given that SMEs generate more than half of the Czech economy's value added, without their involvement it would be difficult to meet the climate and environmental targets and the requirements related to sustainable development that are specified at the national or European level. The issues of low-carbon economy and resource efficiency is one of the key topics that will affect the operation of the Czech economy in the future.

The Czech Republic has long been struggling with issues relating to the energy intensity of its economy⁶⁹ and it will find it difficult to achieve climate neutrality as required by 2050, mainly due to the large share of industry⁷⁰ that is in some cases very costly to decarbonise completely.

Although this change may be facilitated by the use of low-carbon technologies, the ambition to invest in such technologies is still relatively low. A relatively significant potential for savings can be found in rationalising the overall energy management in production and technological processes, especially in highly energy-intensive industries and services, and also in improving the energy performance of buildings and developing passive buildings for SMEs. However, in addition investing public funds, it is advisable to encourage the use of private investments in a low-carbon economy and energy efficiency, including innovations in these areas, because the transition to a low-carbon economy will require considerable investments in reducing energy consumption in businesses.

Another area that leads to a shift towards a low-carbon economy is the promotion of energy from renewable sources, so it will be necessary

⁶⁹ Units of energy consumed per unit of GNP generated.

⁷⁰ The industry sector accounts for 31.9% of the Czech economy, available at: <https://www.spcr.cz/muze-vas-zajimat/ekonomika-v-cislech>

to systematically support the introduction of RES for own consumption, given its potential within the SME segment. Increasing RES use in SMEs, including their premises, equipment and processes, is one of the prerequisites for achieving the targets specified in this area. However, despite a significant reduction in the cost of some RES, their share is currently stagnating, which – for now – does not indicate that they have become competitive with other energy sources.

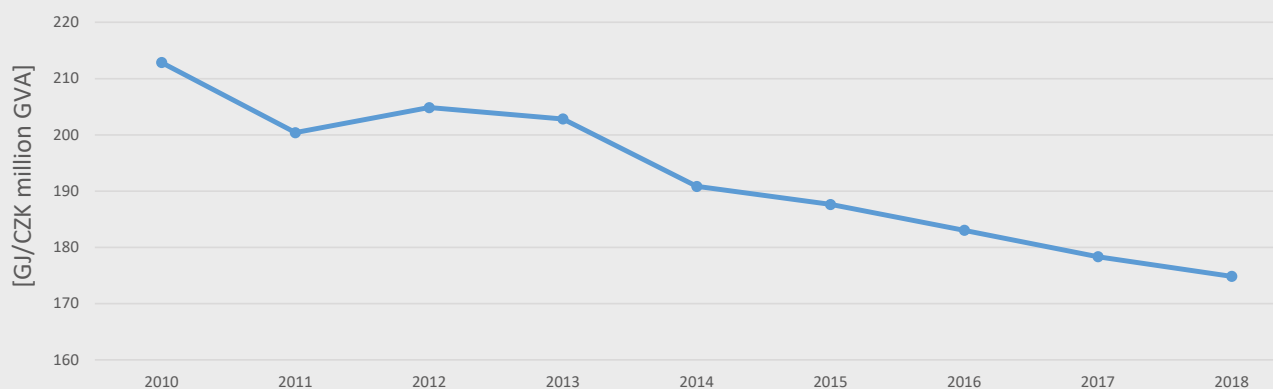
Intensive transport of products, raw materials and also people is both an irreplaceable resource and a by-product of business activity, but it also increases emission of CO₂ and other harmful substances. The solution is to support SMEs in acquiring alternative-propulsion vehicles, whose purchase price tends to be higher – this, along with the vehicles' shorter range and incomplete infrastructure, is one of the main obstacles to the use of alternative fuels. This could help increase the currently small share of alternative-propulsion vehicles in the Czech Republic.

In recent years, the Czech Republic has also been struggling with the impacts of chronic droughts. Water infrastructure, which supplies a significant portion of manufacturing business with water, attests to the negative impacts of droughts in the Czech Republic due to climate change, resulting in a shortage of both surface water and groundwater. Therefore, it is necessary to ensure sustainable water management, including in SMEs, in order to eliminate the risk of reduction or suspension of production in industrial and energy facilities due to a lack of available water. However, the biggest problem in implementing the appropriate measures is their long payback

period or, for example, the legislative barriers to the use of wastewater, which results in insufficient investment in cost-effective measures that should be used for sustainable water management and the related optimisation of water consumption in businesses. This implies the need to ensure sustainable water management in the industrial and energy sectors in terms of water circulation and recycling in buildings.

The Czech Republic is also striving to implement elements of a circular economy. The essence of society's transition to a circular economy is reliance on closed-loop material flows, thus retaining the value of products and materials within the economic cycle for as long as possible. Consumption of raw material resources is expected to more than double by 2050. However, the Czech Republic is still characterised by insufficient infrastructure of innovative technologies for the recovery, processing and use of secondary raw materials, and insufficient emphasis on waste prevention, e.g. in industry or construction. It is therefore necessary to introduce tools that favour waste prevention and recycling/material recovery over landfilling. Also, one of the successful preconditions for realising a circular economy is the efficient management of mineral resources. Demand for global critical raw materials is currently growing, which is why primary raw materials will continue to play a key role. An integral part of the changes aimed at strengthening the Czech Republic's resilience and developing its open strategic autonomy is to better mobilise the domestic potential of the Czech Republic and, by extension, of the EU.

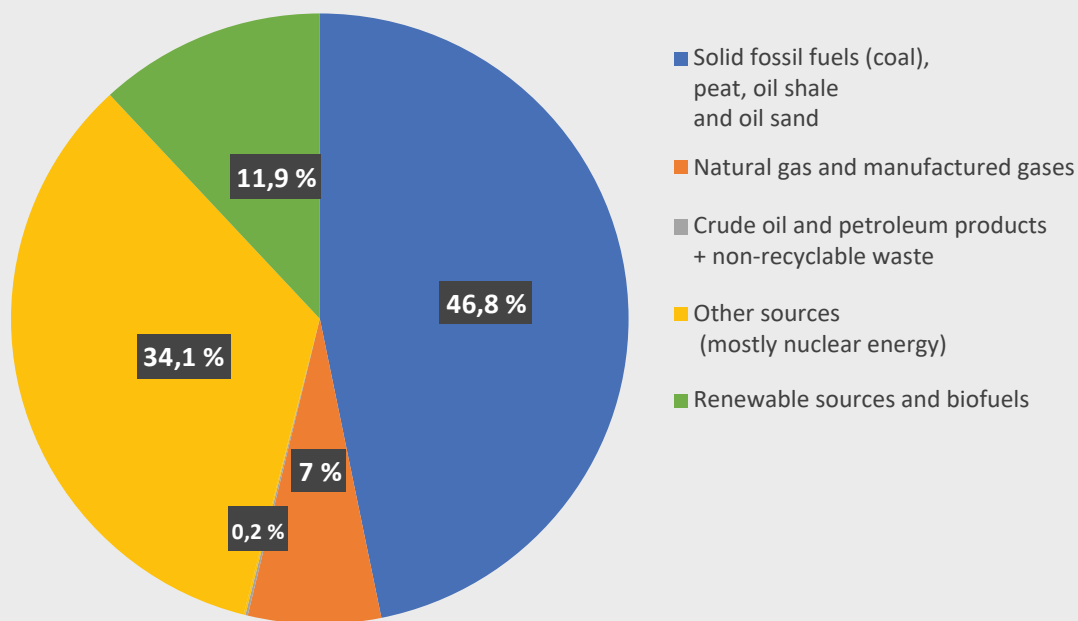
Chart 12: Trends in the energy intensity of Czech industry in 2010–2018



Source: Ministry of Industry and Trade⁷¹

⁷¹ See the *Report on progress towards the national energy efficiency targets for 2020*

Chart 13: Gross electricity production in the Czech Republic in 2018, by source



Source: Eurostat⁷²

⁷² See *Energy data – 2020 Edition*

STRATEGIC OBJECTIVE – TRANSITION OF SMEs TO A LOW-CARBON ECONOMY

For the future, sustainability as such constitutes a crucial element not only according to the *European Green Deal*, but also according to the *SME Strategy for a sustainable and digital Europe*. Out of consideration for climate change and other environmental aspects, it will be crucial to implement a gradual transition to sustainable business practices, which will – among other things – affect the further development of SMEs and their competitiveness. It is therefore necessary to focus on SMEs and provide them with the widest possible range of support tools aimed at reducing greenhouse gas emissions, with an emphasis on energy savings, renewable energy sources and the implementation of clean mobility elements.

Investment support thus represents a key prerequisite for the implementation of measures that will contribute to meeting energy and climate targets. These measures often pay back economically in the long term, which significantly exceeds the investment possibilities of a large proportion of SMEs. Therefore, it is important to ensure the availability of a sufficient number of appropriate financing instruments and,

at the same time, to set the legislative and systemic conditions so that as many of the required measures as possible are not only directly financially supported, but also indirectly favoured. In addition, attention needs to be given to the increasing mobility, which also represents an environmental burden, and SMEs' can thus make a significant contribution to reducing it. Support for investments focusing on the low-carbon economy and energy transition, including energy efficiency improvement and the transition to clean and efficient energy production and use and to sustainable transport, will be of key importance. SMEs make a significant contribution to meeting the targets that arise for the Czech Republic under the Paris Agreement of 2015, or to accomplishing the EU's energy and climate targets by 2030 and achieving climate neutrality by 2050.

The measures specified play a key role in reducing the production of greenhouse gases and other harmful substances, and are in line with other strategic documents at the national level, i.e. especially the *State Energy Policy of the Czech Republic* or the *National Energy and Climate Plan*.

Specific objective – Improving the energy efficiency of SMEs

Support for energy-saving measures in the SME segment will lead to a reduction in the energy intensity of the Czech economy, especially through reducing the energy consumed per unit of GNP generated, as a result of introducing more efficient technologies in industry or renovating buildings intended for businesses.

The implementation of these energy-saving measures in SME buildings will also lead to a reduction in the overall energy intensity of the Czech building stock, an increase in the pace of building renovations, and a reduction in the number of buildings that fail to meet energy-performance or indoor-quality requirements.

Reducing the energy intensity of businesses will also directly lead to a reduction in the growth of final energy consumption in the business sector and the neutralisation of the impact of economic

growth on the level of final energy consumption, and an increase in the competitiveness of the business sector in the long term.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Support reducing the energy intensity of SMEs' energy economy and introducing "smart" elements of energy efficiency management in buildings. 	MIT and MoE
<ul style="list-style-type: none"> • Support the construction of new SME buildings within the passive energy standard that use RES in combination with energy storage. 	MIT

Specific objective – More intensive RES use within SMEs

Systematically supporting SMEs in the introduction of RES will have a positive impact on achieving competitiveness with other energy sources, i.e. given the growing emphasis on climate protection under the energy policy, and the ever-increasing climate and energy targets which call for a significant transformation of the energy mix and, by extension, of the entire economy. Support for

SMEs will focus on the very basic types of RES, i.e. solar, hydro, wind, and biofuels. SMEs can mainly contribute in the area of RES production and use on-site, including their premises, equipment and processes. From the perspective of SMEs, increasing the share of RES makes sense especially in the areas of production, storage and subsequent use of electricity, or heating and cooling.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Support the use of solar thermal systems and solar power plants in SMEs. 	MIT and MoE
<ul style="list-style-type: none"> • Support the use of small hydroelectric power plants in SMEs. 	MIT and MoE
<ul style="list-style-type: none"> • Support the use of wind farms in SMEs. 	MIT and MoE
<ul style="list-style-type: none"> • Support the efficient use of biogas and biomass in the production of heat and electricity in SMEs. 	MIT

Specific objective – Disseminating elements of clean mobility among SMEs

Clean mobility is another key element in meeting climate targets, because vehicles with conventional internal combustion engines are a significant source of greenhouse gas emissions. Since they produce lower to zero air pollutant emissions, CO₂ and noise at the place

of operation, alternative-propulsion vehicles are a suitable object of support. In addition to the higher purchase price and comparably short range of the vehicles, one of the main obstacles is the absence or slow development of infrastructure for the use of alternative fuels. Therefore, the

measures will focus on reducing dependence on fossil fuels and contribute to reducing emissions (greenhouse gases and pollutants) from transport through investments in sustainable transport in the SME segment in terms of supporting electric and hydrogen vehicles and infrastructure and, to a limited extent, compressed natural gas

(CNG) or liquefied natural gas (LNG) vehicles and infrastructure. The measures are in line with the *National Action Plan for Clean Mobility*, which focuses, among other things, on reducing the negative environmental impacts of transport, especially in terms of emissions.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Support SMEs in acquiring alternative-propulsion vehicles (electricity, hydrogen, or CNG, LNG and plug-in hybrids). 	MIT and MoE
<ul style="list-style-type: none"> • Support the construction of charging and filling stations. 	MIT, MT and MoE

STRATEGIC OBJECTIVE – IMPROVED RESOURCE EFFICIENCY OF SMEs

The aim is to increase the share of Czech SMEs that are resource efficient. This area mainly includes introducing elements of a circular economy and efficient water management. The Czech Republic must adapt to modern environmental trends and, at the same time, respond to changing climatic conditions and the need to ensure the Czech Republic’s raw material self-sufficiency and to optimise the use of natural resources. An integral part of the changes aimed at strengthening the Czech Republic’s resilience and developing its open strategic autonomy is to better mobilise the domestic potential of the EU and, by extension, of the Czech Republic. It is therefore necessary

to focus on SMEs and – for this purpose – provide them with the widest possible range of support tools that are aimed at improving raw material and water efficiency through the introduction of circular economy tools. The different measures will thus focus on supporting the acquisition of the necessary technologies or implementing the necessary optimisations within SMEs, and also on gaining access to professional advice and consulting, as well as systemic or legislative measures that will create the conditions for SMEs to be able to implement individual activities and, in turn, meet the required targets.

Specific objective – Reducing water consumption in SMEs

The aim is to contribute, through interventions in the SME segment, to eliminating the long-term scarcity of water in soil and watercourses, as in addition to major environmental impacts, industrial enterprises and other businesses are among the first to be affected by possible restrictive measures to reduce water

consumption. The measures specified represent a benefit in the form of reducing the amount of water that is supplied for industry and energy purposes, thus improving sustainable water management and optimising water consumption in businesses. As a result of the implemented measures, SMEs’ costs will be reduced and

their competitiveness will improve. Efficient water management will also contribute to the development of new technologies with lower water consumption that relies on water recycling and reuse. At the same time, the stability of ecosystems and the ecosystem services they provide will be maintained in the Czech Republic, the consequences of hydrological extremes will be mitigated, more water will be preserved for aquatic ecosystems and groundwater replenishment, and industry's resilience to climate change will improve.

SMEs will thus be supported in line with the national documents that address the issue of combating drought and improving water efficiency, i.e. in particular the *Strategy on Adaptation to Climate Change in the Czech Republic* and also the *Strategy for Protection Against the Impacts of Drought in the Czech Republic* or the *National Action Plan for Adaptation to Climate Change*. At the European level, the document titled *A new Circular Economy Action Plan For a cleaner and more competitive Europe* is of key importance.

MEASURE

(CO-)RESPONSIBILITY

- | | |
|--|-----|
| <ul style="list-style-type: none"> • Support the optimisation of water consumption in SMEs by introducing technological changes aimed at saving water through primary reduction of water consumption, direct recycling and reuse of polluted/used water or, where relevant, even complete elimination of water use. | MIT |
| <ul style="list-style-type: none"> • Support the collection, accumulation and use of rainwater in SMEs. | MIT |
| <ul style="list-style-type: none"> • Support the purchase of consulting services aimed at developing a water recycling plan in the manufacturing sectors of SMEs. | MIT |

Specific objective – Increasing SMEs' participation in the circular economy

The Czech Republic is striving to implement elements of the circular economy, which is why it will focus on supporting the acquisition of innovative technologies for obtaining secondary raw materials in the SME segment, which – along with support through other interventions for SMEs – will reduce material intensity in production, reduce the consumption of primary resources, increase the use of secondary raw materials, and reduce production costs. In the overall context, these interventions should mainly help to return treated waste as a secondary raw material into

the economy, i.e. to produce new products, save primary resources, and reduce waste production and landfilling. Finally, interventions should also help to create new business models and increase value added within the preparation of materials for production in the Czech Republic.

One important aspect for successfully implementing the circular economy is also the involvement of SMEs in sourcing critical raw materials and in the comprehensive waste-free processing of all extracted raw materials.

In pursuance of the task arising from the *Raw Materials Policy of the Czech Republic in the Field of Mineral Raw Materials and Their Resources* of 2017, it is desirable to use well-proven foreign models to create a system to support SMEs that conduct geological surveys, including financial and institutional support. In addition to sourcing critical commodities abroad, attention also needs to focus on sourcing these commodities within the Czech Republic and the EU. To secure resources, measures need to be taken to diversify supplies from both primary and secondary sources, reduce dependency and improve the efficient and circular use of resources, including sustainable product design. Successful transition and modernisation of the economy depends on the sustainable sourcing of primary and secondary raw materials that are required in order to develop clean, digital and hi-

tech technologies in all industrial ecosystems.

The focus of the objective is in line with the national strategic documents in the given area, in particular the *Updated Secondary Raw Materials Policy for 2019–2022* and the *Waste Prevention Programme of the Czech Republic*. Furthermore, the measures specified are also in line with other documents at the national level, which also include the *Waste Management Plan of the Czech Republic for the period 2015–2024*, the *Waste Prevention Programme of the Czech Republic* and the emerging *Strategic Framework for the Czech Republic’s Circular Economy 2040* (Circular Czechia 2040). At the European level, the recently released document titled *A new Circular Economy Action Plan For a cleaner and more competitive Europe* will be of key importance.

MEASURE	(CO-)RESPONSIBILITY
<ul style="list-style-type: none"> • Support the acquisition and implementation of innovative technologies for the recovery, processing and use of secondary raw materials from end-of-life products and materials, for the production of products containing secondary raw materials, including support for material recovery from waste and technologies enabling new or greater use of secondary raw materials to replace primary sources. 	MIT
<ul style="list-style-type: none"> • Support investments in innovative technologies to reduce the material intensity of production and the introduction and optimisation of product material ecodesign. 	MIT
<ul style="list-style-type: none"> • Introduce a reduced VAT rate for recycling processes. 	MIT
<ul style="list-style-type: none"> • Support SMEs in sourcing mineral raw materials, especially critical raw materials in the Czech Republic and the EU. 	MIT
<ul style="list-style-type: none"> • Support SMEs in sourcing mineral raw materials, especially critical raw materials in third countries. 	MIT
<ul style="list-style-type: none"> • Support SMEs in implementing waste-free technologies in the extraction of mineral raw materials, and take advantage of the possibility of support for purchasing these technologies abroad. 	MIT

IMPLEMENTATION OF THE STRATEGY

A top-down photograph showing four hands, each wearing a different colored business sleeve (light blue, dark blue, white, and dark blue), reaching towards two wooden puzzle pieces on a dark, textured wooden surface. The hands are positioned around the puzzle pieces, suggesting a collaborative effort to complete a task or strategy.

SME support policy is a topic with a large competence extraction, which brings together the activities of a variety of actors. In order for the strategy to be successful, it must be implemented through joint measures that require the active involvement not only of public administration actors but also of SMEs themselves, as they will play an important role within the partnership in implementing the strategy.

In terms of consistent management of this strategy, a key element is its implementation portion – the implementation of measures will be carried out through implementation plans for each of the key areas.⁷³ They elaborate the defined objectives into one or multiple specific measures that are crucial for the achievement of the required change/objective. In addition, each of the measures also includes a set of indicators containing baseline and target values, data

sources for monitoring and the frequency of data collection, expected sources of financing, an implementation schedule, and specification of (co-)responsibility. It should be noted that all of the measures specified were defined in collaboration with the actual responsible actors.

Each of the implementation plans is designed so that it also constitutes the implementation schedule for the given key area of the strategy, until the end of its implementation. In this respect, many of the measures specified are time-independent and can be implemented in the long term, regardless of the effects of the COVID-19 pandemic. However, a significant amount of funding will be concentrated in the years 2021 to 2023, in response to the economic downturn brought about by measures against the spread of COVID-19 and the need for economic recovery.⁷⁴

⁷³ The implementation plans are annexed to this strategy (Annex 2a-g)

⁷⁴ See Next Generation EU and the related tools.

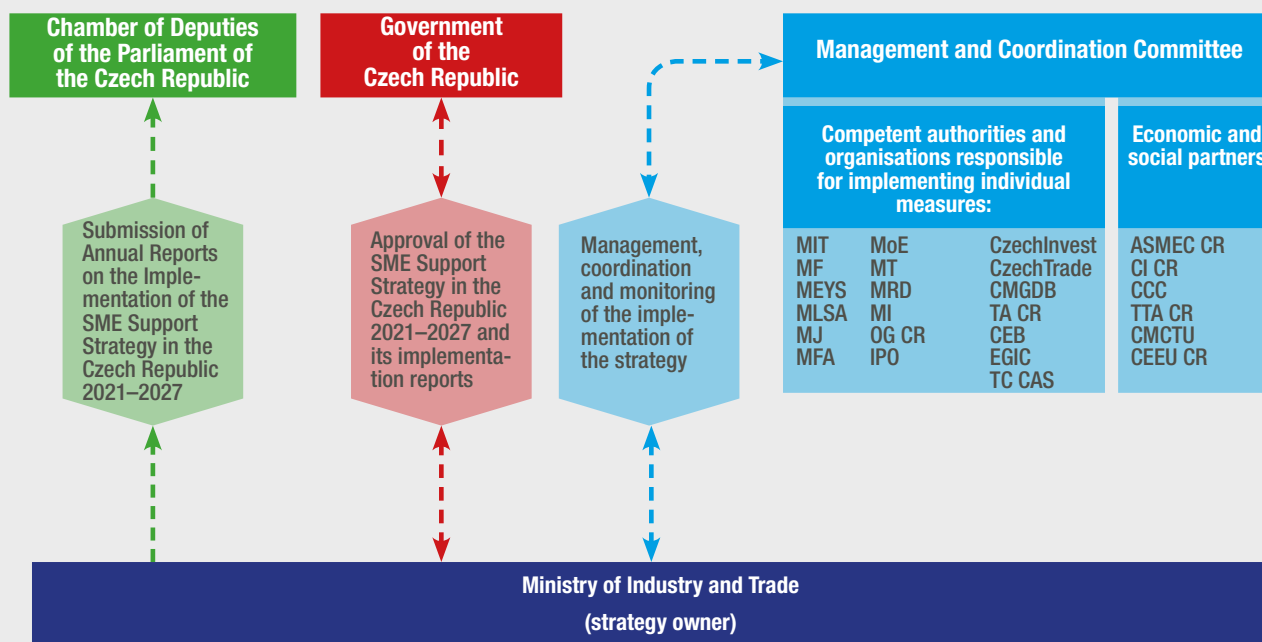
MANAGEMENT OF THE STRATEGY

The actual management of the strategy will be facilitated by its links with the existing policy framework and programmes (European and national) to support SMEs. The strategy as a whole is approved by the government of the Czech Republic, which also approves the aggregate information on its implementation. Its fulfilment will thus be subject to supervision by the executive branch, but – in accordance with Act No. 47/2002 Sb., on support for SMEs – also by the legislative branch, namely the Chamber of Deputies of the Parliament of the Czech Republic.

The coordination of the implementation of the strategy is concentrated at the Ministry of Industry and Trade, which is also the owner of the strategy, but given the highly interdepartmental and interdisciplinary nature of the strategy, the implementation of the measures specified will also take place at other authorities and ministries/ departments depending on their responsibilities, in accordance with Act No. 2/1969 Sb., on the establishment of ministries and other bodies of central government of the Czech Republic. The actual implementation of the measures will be carried out within the personnel and financial limits set for the relevant chapters of the state budget, i.e. individual ministries and authorities.

The management structure of the strategy includes the Management and Coordination Committee, which plays the role of the main body for managing, coordinating and monitoring the implementation of the strategy and which discusses, at least annually, the current situation and progress in implementing the various measures, proposals for changes to implementation plans within each key area, where relevant, and proposals for changes to the strategy itself. Members include representatives of the relevant ministries (MIT, MF, MEYS, MLSA, MJ, MFA, MoE, MT, MRD, MI), institutions (OG CR), agencies and organisations (CzechInvest, CzechTrade, CMGDB, TA CR, CEB, EGIC, TC CAS, IPO) and economic and social partners (ASMEC CR, CI CR, CCC, CEEU CR, TTA CR, CMCTU) that participate in implementing the strategy. The Management and Coordination Committee also deals with documents relating to the progress in implementing the strategy, and other relevant documents. The Management and Coordination Committee thus represents a mechanism to ensure the widest coordination, with the participation not only of the bodies involved in the implementation, but also of the economic and social partners.

Figure 3: Management of the Strategy to support SMEs in the Czech Republic 2021–2027



The Implementation Team, which operates within the MIT, plays a supporting role in implementing the strategy – it primarily processes aggregate information on the implementation of the strategy, and for that purpose it collects information and documents from those responsible for implementing each measure and accomplishing the set targets. In addition, it communicates with the actors (co)responsible of the measures and other collaborating entities in order to propose updates to the implementation plans or the strategy itself.

With regard to changes to the strategy, it should be noted that it is a long-term strategic document that is subject to changes at various levels. Changes to the strategy (e.g. changes to the objectives and measures) or to the way it is implemented may be necessary due to external factors (e.g. a government decision or the occurrence of a threat with a societal impact) or may be implemented at the initiative of one of the actors involved in implementation (e.g. based on the monitoring of the fulfilment of the

strategy objectives, or based on the results of evaluations). Since there is regular monitoring, it will be possible to make sure any potential problems are identified and necessary changes made in a timely manner. However, changes to the structure of the strategic objectives within the different key areas should only be made in highly exceptional and justified cases. In the case of specific objectives, these may be removed if they have already been fulfilled and there are no ongoing measures linked to them. Changes to the implementation plans then represent a common part of implementing the strategy – measures that have already been implemented will be removed and new measures will be added as necessary in the updated versions of the implementation plans for the different key areas. It is also possible to define new specific objectives and measures that respond to current trends and developments.

MONITORING AND EVALUATION

Inspection of the fulfilment of the content of the strategy will be based on regular monitoring and evaluation. Starting in 2022, an *Annual Report on the Implementation of the Strategy to support SMEs in the Czech Republic 2021–2027* will be prepared annually, which will present a summary report on the implementation of this strategy and, at the same time, inform about the trends in small and medium-sized enterprise in the Czech Republic, in accordance with Act No. 47/2002 Sb., on support for SMEs. This report will be subject to approval by the Government of the Czech Republic and will subsequently be submitted to the Chamber of Deputies of the Parliament of the Czech Republic.

In general, the monitoring of the strategy focuses on tracking the trends and progress in the key areas specified. The fulfilment of the objectives, targets and measures specified will thus be monitored through defined output and result indicators of the strategy (quantitative and qualitative) within each of the key areas, and the indicators will serve as a basis for evaluating whether the expected changes are taking place. The effectiveness of the use of funds and the progress achieved in the supported areas will be monitored and evaluated within the different implementation tools, i.e. support programmes.

For effective management, the indicators of individual objectives must be continuously evaluated at the specified intervals/dates to determine whether the results achieved match the objectives specified. The actor (co-)responsible for the different measures will participate in the annual collection and evaluation of data and the preparation of the annual report – each of

the actors is in charge of assessing the progress made, and monitoring and reporting relevant indicators for those measures that fall under their responsibility. Therefore, the availability of data that describe how results and findings can affect changes within strategic and specific objectives in each key area will be of key importance. Regular monitoring will serve as quick feedback on the progress of implementation. However, the context in which the strategy is being implemented (i.e. external trends and factors) should also always be monitored. Due to the high complexity of the issue of SME support, it is necessary to pay attention to the overall context, which is why the various global and European indexes play a key role here, and their trends will also be monitored.

For the purposes of assessing the implementation of the strategy, a mid-term evaluation will be carried out by an independent contractor in the middle of the period (2024), which will focus on evaluating current progress in accomplishing the objectives, the implementation method, and if relevant, it will make adequate recommendations for implementation, or propose a revision to the strategy and its implementation in subsequent years. At the end of the period, a final evaluation will be carried out, which will focus on evaluating the extent to which the objectives of the strategy have been accomplished. Overall, both evaluations should assess the relevance, effectiveness, efficiency and impact of interventions, both overall and at the level of individual objectives. These will therefore be evaluations that focus on the results and impacts of the programme.

COMMUNICATION

Given that communication on planned or implemented measures, the progress of implementation of the strategy, its objectives and impacts is one of the key elements for its successful implementation and for accomplishing the set objectives in 2021–2027, the promotion and communication of the strategy will include seminars, workshops, conferences, roundtables, etc. These information channels will provide direct contact with entrepreneurs and the professional public, as well as valuable feedback.

The aim of communication with entrepreneurs, i.e. potential beneficiaries of support, is also to promote the support itself. A key tool in this respect will be the regular updates to the SME Support Catalogue, which provides a comprehensive overview of SME support providers and programmes in the given period.

SOURCES OF FINANCING

The financing of the key areas and individual measures will be implemented through the budgetary resources of the Czech Republic (state budget) and the EU (EU funds under direct, indirect and shared management), which are presented in more detail below. Last but not least, the private resources of the businesses themselves will contribute to accomplishing the strategy's objectives, whether in the form of co-financing state support, implementing some of the planned activities without using state support, or activating private investors.

European Regional Development Fund

The European Regional Development Fund is one of the main financial instruments of EU cohesion policy. Its aim is to help reduce the gap between the levels of development of Europe's various regions and the backwardness of the least favoured regions. This fund can be used to finance a wide range of investment activities of businesses, including in particular support

for research, development and innovation, development of skills and improvement of services for entrepreneurs, investments in digitalisation and digital infrastructure, support for a low-carbon economy, etc.

European Social Fund Plus

The European Social Fund focuses on supporting non-investment projects in employment promotion, supporting social inclusion and equal opportunities with a focus on the development of the labour market and human resources. It can be used to finance measures that are aimed at education, development of skills or retraining.

Just Transition Fund

The Just Transition Fund is the first pillar of the Just Transition Mechanism. It is an EU support instrument intended to assist coal regions in their transition to a low-carbon economy without negative economic and social impacts.

Recovery and Resilience Facility

This resource is the largest component of the European recovery instrument entitled *Next Generation EU* and is thus an exceptional EU support instrument that provides extensive financial support to EU Member States in response to the economic downturn brought about by measures to combat the spread of COVID-19. It aims to provide financial support for the implementation of Member States' reforms and public investment projects, which will permanently strengthen (economic, social and territorial) cohesion and resilience, while contributing to strengthening growth and job creation, mitigating the effects of the crisis, and further contributing to the green and digital transitions and to addressing the challenges associated with them.

Modernisation Fund

The Modernisation Fund is funded mainly through the monetisation of emission allowances in the EU ETS system for the period 2021–2030. It focuses on promoting sustainable technologies, especially on priority areas that include the production and use of energy from renewable sources, energy efficiency and energy storage and distribution facilities.

EU programmes (Horizon Europe, Digital Europe, InvestEU⁷⁵, Single Market Programme, etc.)

EU programmes are support instruments that are administered exclusively by the European Commission, unlike operational programmes

which provide resources from European funds (ERDF, ESF+ and JTF) and which are administered under shared management by a Member State and the European Commission. For most programmes, the Commission announces calls, in response to which it is possible to submit applications for support in Europe-wide competition, determines their budget and deadlines. These programmes thus represent another possibility of obtaining funding for activities in the areas of research, development and innovation, entrepreneurship, digitalisation, development of digital and energy infrastructure, etc.

State budget (national and departmental programmes)

National funds will be used mainly to support areas that cannot be supported from the above sources, or where there are not enough funds available for implementing the planned activities, i.e. for accomplishing the set objectives. These support instruments are under the responsibility of individual ministries or, where relevant, their semi-budgetary organisations, and the source of their financing are state budget funds.

⁷⁵ The InvestEU programme is, in fact, an EU budget guarantee, which is a risk-sharing instrument, but does not directly provide liquidity to finance national SME support programmes. However, using an EU guarantee makes it possible to increase the absorption capacity of the programmes and, in turn, support a larger number of projects.

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THE STRATEGY WAS CREATED WITH SUPPORT FROM

