

# Innovation Strategy of the Czech Republic 2019—2030



Czech  
Republic  
**The Country  
For The Future**



## **Andrej Babiš, Prime Minister of the Czech Republic**

You hold in your hands a crucial document. The plan that will bring our country back to leading Europe. Where we once were and where we wish to return. A specific plan. The countries that have chosen to promote science, research and innovation as key national priorities are now the ones that prosper. Switzerland, Finland, Sweden and Denmark, which are geographically and economically close to us and which decided some time ago to set out on the road of massive support for innovation. Thanks to this, they are now among the global leaders. And the Czech Republic has all the prerequisites to do the same. Exceptional knowledge potential. We are a technologically oriented country and meet the strictest economic criteria. When is the time to venture into such bold changes if not now, when we are amongst the most stable economies in Europe, when our companies are achieving record results and when our scientists are gaining ever-growing respect in the world?

The government of the Czech Republic has therefore decided that support for science, research and innovation will become an absolute priority. We have the highest ambitions. Within twelve years to become one of Europe's innovation leaders and a country of the technological future. If we want to maintain our performance in an increasingly competitive environment, we must focus on final production, technology solutions and services – based on knowledge. The goal must be not only to generate volume but mainly to generate added value.

This is why we have put together a team of the most capable personalities in the field of innovation from the business environment, scientists, academics and public administration staff who have prepared the most daring innovation strategy of recent years with a huge overlap of jurisdictions, concentrating the activities of a number of ministries and organisations. We are ready to invest record resources in science, research and innovation to create from the Czech Republic a country that will not only become a symbol of knowledge and advanced technology but also host to the world's most important scientific authorities. By combining our industrial traditions, research background and entrepreneurial skills, we have an extraordinary chance to place the Czech Republic among the most advanced countries by 2030.

It will be a very challenging journey. This is not just about resources, it is about changing the perception of the future position of our country, about the belief that we are able to achieve our goals, about introducing a consistent strategic management system. That is why its implementation will be under the direct authority of the Prime Minister, through the Government Council for Research, Development and Innovation. Much extremely demanding work awaits us, but I am convinced that with our joint efforts we will shift our country back where it once belonged.

## **Karel Havlíček, Council for Research, Development and Innovation**

Few countries have to hand so many strategic documents and visions as the Czech Republic. The problem is that it has never been very good at using them. Political inactivity, a ministerial mentality and the incredible complexity of the action plans. Which is why the visions remained just on paper. This time it is and will be different.

We have created a team of top businessmen and managers, representatives of the Czech Academy of Sciences, the best universities, research organisations and ministries; a team which has identified all activities in the science, research and innovation. We have completed critical and ongoing innovation-related plans and activities, and complemented them with those that are missing or are not developing. We have defined the nine strategic pillars that are crucial to becoming one of Europe's innovation leaders. We have confronted all of this with the international environment, the requirements for innovation performance and, in particular, with the specific examples of successful countries.

The strategy must be timeless, supra-ministerial and apolitical. A simple framework document, which will have legislative support and at the same time ambitious goals consistent with the international requirements of a number of innovative Scoreboards. We are working with three of the most important. These are the Summary Innovation Index (SII), the Global Innovation Index (GII) and the Innovation Output Indicator (IOI).

According to the SII, the Czech Republic is in the most numerous group of Moderate Innovators. The plan? We want to be among the Strong Innovators by 2025, and by 2030 in the leading European group, Innovation Leaders. Our fourteenth place in the EU in the GI and 13th place according to the IOI criteria now put us at the exact average of the European twenty-eight. By 2025, we want to be in the top ten and by 2030 in the top seven EU countries, within both the GI and the IOI.

The means of management and control is absolutely fundamental to the future success of this strategy. Most national strategic plans have failed on this in the past. Each of our pillars has a clear management responsibility for achieving its goals. Each year, their guarantors will prepare an action plan for all the changes; we will evaluate this on a monthly basis at the Council for Research, Development and Innovation, with the Prime Minister's involvement.

I thank all those who have worked tirelessly on this for several months. I appreciate the fact that we have managed to create a balanced strategy involving representatives of all areas of science and innovation. For the first time, an innovation concept has emerged which covers national key activities across ministries, setting out targets and strategic tools for their implementation. And it has all the best prerequisites to make it really work.

## **Conclusion**

The Czech Republic has an extraordinary opportunity to become one of Europe's innovation leaders by 2030. As demonstrated by the international comparison, it has for this the potential in the crucial instruments of positive change, notably in innovative infrastructure and the promotion of digitisation. To add to this actual innovation potential it also has a clear understanding of what needs to be done to bring about change, as demonstrated by the Ten Commandments of the Action Plan, nine areas that are important for change. Last but not least, it also has the political will to make these changes.

One of the first steps will be to increase spending on research and development. This spending will be tied to the evaluation of research, which will continually improve by international comparison and be increasingly useful for the quality of life of people in the Czech Republic.

As an industrial country that has always been at the forefront of development, we are not afraid of the changes known as Industry 4.0, but will support research and development that will strengthen the Czech Republic's position in the world, especially in artificial intelligence and the digitisation of branches of the economy. The quality of citizens' lives will also be improved by the digitisation of public administration services, the possibility to provide their data to public administration just once and to communicate with it at a single point. Of particular importance will be the enforcement of a citizen's right to digital service. In the wider world we have the reputation of an extremely inventive and creative nation. We always had exceptional technical potential, capable engineers and technicians. The new challenges call for an efficient system of polytechnic education, for new ways of teaching, for digital education, support for technical education and manual skills from our nurseries onwards. School education programmes will be adjusted as well as the training of teachers in practice, and pedagogical students will be managed to this effect.

Intellectual property protection will also be systematically improved. This requires, in particular, the promotion of systematic education in this field from elementary school onwards, the promotion of patent protection and the enforcement of patent rights.

Support will also be strengthened for endogenous Czech companies, spin-offs and start-ups arising as a result both of academic research and of the natural needs of businesses in all areas of social needs. In line with the Israeli model, we will be creating an environment where the state with its tools will support the most risky period of emergence of new companies. Using EU funds and national resources, there will be support for the most promising centres and research infrastructures, both centres of international importance and innovation centres which will be of the greatest benefit for Czech society and the economy.

The production potential of the Czech economy, which in the past was supported by investment incentives, will be renewed and extended, subject to a commitment to high value added output and to cooperation with the Czech Republic's research infrastructure.

In the past, investment in the Czech Republic has been geared towards supporting employment, while from now they will focus on promoting innovation.

Current and future infrastructure includes not only roads, motorways and railways but also telecommunications infrastructure and its associated logistics. We will be ready for self-driving transport, new transport fuels, having regard inter alia to the impacts of climate change. In a short time, there will reform to the construction law so that the approval process will be radically accelerated and all infrastructure can be built in a short period following the example of the most dynamic innovative countries.

Czechoslovakia was an acknowledged name in the world. The Czech Republic has the "right" to a similar brand. All the major means of communication will be used to provide systematic support for this brand to grow in the world, as the mark of a dynamic country that has the conditions for a good quality of life.

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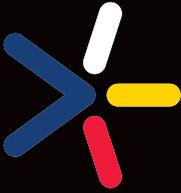
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**List of abbreviations**

AI .....	Artificial Intelligence	Programmes, approved under Czech Government Resolution No. 107 of 8 February 2017
CDO .....	Chief Data Officer	
CEF .....	Connecting Europe Facility	
CR .....	Czech Republic	OECD .....
IP .....	Intellectual Property	Organization for Economic Cooperation and Development
EIF .....	European Investment Fund	OP RDI .....
ESIF .....	European Structural and Investment Funds	Research and Development for Innovations Operational Programme
EU .....	European Union	PPS .....
FEP .....	Framework Educational Programme	Purchasing Power Standard
GDP .....	Gross Domestic Product	R&D .....
GERD .....	Gross Expenditure on R&D	Research & Development
GII .....	Global Innovation Index	RD&I .....
ICT .....	Information and Communications Technologies	Research, Development and Innovation
IOI .....	Innovation Output Indicator	RIS3 .....
IoT .....	Internet of Things	National Research and Innovation Strategy for Smart Specialization of the Czech Republic
IT .....	Information Technology	RVVI .....
Methodology ..	Methodology for Evaluating M2017+ .....	Council for Research, Development and Innovation
Research Organisations and Research, Development and Innovation Purpose-tied Aid		SFDI .....
		State Transport Infrastructure Fund
		SII .....
		Summary Innovation Index
		SME .....
		Small and Medium Enterprises
		STEM .....
		Science, Technology, Engineering and Mathematics
		UV CR .....
		Office of the Government of the Czech Republic



## **The Czech Republic: The Country for the Future**

**The Country for R&D: Funding and Evaluation of R&D**

**The Country for Technology: Polytechnic Education**

**The Country for Start-ups: National Start-up and Spin-off Environment**

**The Country for Digitalization: Digital State, Manufacturing and Services**

**The Country for Excellence: Innovation and Research Centres**

**The Country for Investment: Smart Investment**

**The Country for Patents: Intellectual Property Protection**

**The Country for Smart Infrastructure: Mobility and Construction Environment**

**The Country for Smart People: Smart Marketing**

Council for Research, Development and Innovation

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