

# Challenges for Bulgarian Industry and the National Recovery and Resilience Plan (NRRP) Implementation

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*Abstract: The implementation of the main projects laid down in the National recovery and resilience plan of Bulgaria is aimed at environmentally friendly technologies, at the circular economy, at digitalization and at the application of innovative business models. Effective financing under the Recovery and Resilience Facility is a mechanism for successful investment projects, contributing to the reconstruction of the Bulgarian industrial sector. The emphasis falls on the Bulgarian industry, on the new European policy and mainly on the National recovery and resilience plan, as a basis for increasing the efficiency of Bulgarian industry. However, a series of issues remain open for resolution in connection with the effective investments of financial resources received, the transparent reporting of results, the highlighting the goals of the Bulgarian industrial policy etc.*

*Key-Words: - Industrial development, Recovery and Resilience Facility, RRF, National recovery and resilience plan, NRRP, The New EU Industrial Policy, Bulgaria.*

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## 1. Introduction<sup>1</sup>

The industry occupies a significant share of the gross added value and GDP of Bulgaria. That is why the improvement of the industrial sector and the implementation of policies that will allow the successful implementation of new technologies and the successful deeper inclusion in the European industry are of primary importance for Bulgaria.

The new European industrial policy is aimed at a long-term change of the paradigm of linear development and aims at a complete transformation of the foundations on which the European industrial model is based. Bulgaria also directs the policy towards environmentally friendly business models, towards a circular economy and digitalization. The Recovery and Resilience Facility (RRF) financing is of primary importance for the economy and industry of Bulgaria.

The implementation of the main projects laid down in the National recovery and resilience plan (NRRP) of Bulgaria depends on successful financing under the RRF and the effective investment of these funds in the Bulgarian economy and mainly for the construction of a modern industrial sector in Bulgaria.

The emphasis falls on the Bulgarian industry, on the New European Policy and mainly on the RRF financing, as a basis for increasing the efficiency of the Bulgarian industry. However, a series of issues remain open for resolution in connection with the financial resources received, such as effective investments, reporting of results, highlighting the goals of the Bulgarian industrial policy and other problems.

## 2 Bulgarian industry, remaining one of the main pillar of the economy and the National Recovery and Resilience Plan (NRRP)

### 2.1. The Covid-19 crisis and its impact on the Bulgarian economy

Bulgarian industry is experiencing the consequences of the unstable and uncertain economic and political environment in the EU and in the world, and in particular in connection with the energy crisis, which imposes

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challenges for the production potential of companies and their competitiveness, as well as attracting foreign direct investment (FDI). Real labor productivity remained stable, increasing after 2012, driven mainly by the manufacturing sector.

The COVID-19 pandemic crisis has had a significant impact on the EU industrial production because it has negatively affected both demand and supply along the external and internal channels of transmission of crisis. Since the beginning of the crisis, the potential of industrial enterprises and employment has decreased, and as a result, a decline in industrial production of developed industrial economies has been recorded. Bulgarian economy, as an integral part of the EU Single market experienced a slowdown in all economic sectors, because of the strong impact of external and internal factors.

The crisis that followed the COVID-19 pandemic of the beginning of 2020 interrupted the decade of growth for the Bulgarian economy, but the economic consequences are weaker than the initial forecasts and fears. Bulgaria's real GDP fell by 4.4% in 2020 and by 0.4% in 2020 and 2021 combined. Consumer spending and exports, supported GDP growth, while investment in fixed assets declined in 2021 and 2022. High employment levels, combined with increases in wages and government energy support measures, supported consumer spending. In 2022, Bulgaria was the EU Member State with the lowest GDP per capita, at 38% below the EU average (Eurostat, 2023a).

The COVID-19 pandemic had a negative impact on the Bulgarian economy and industry. The Bulgarian GDP grew significantly by 7.6% in 2021, after an output decrease by 4% in 2020. In parallel, inflation rose in the second half of 2021 as fuel and food prices rose (OECD, 2021). In 2022, the GDP growth rate was of 3.4% despite high inflation rates and political uncertainty.

Consumer spending and exports spurred GDP growth, in contrast to investment in fixed assets, which declined in 2021 and 2022. High employment levels, combined with increases in wages and welfare benefits and government energy support measures, stimulated consumer spending. The growth of exports in 2022 was encouraged by the opportunity to overcome shortages in the supply of energy, food, metals and other materials.

Although the initial rise in inflation was largely driven by external factors, such as high energy and food prices, domestic factors have become increasingly important. Average annual consumer price inflation (HICP) was 13% in 2022, well above EU headline inflation of 9.2%, but still below inflation rates in the Baltic states, as well as Poland, the Czech Republic and Hungary. Nominal wages grew by 16.4% in 2022, well above the rate of inflation. Rapid wage growth creates the potential for spillover effects and greater inflationary resilience.

According to the NSI data, the industrial sector decreased its relative share in the added value of the economy by 0.6 percentage points from 35.0% to 34.4% between the first quarters of 2022 and 2023, but the relative share of added value generated by activities in the service sector, including the industrial service sector, increased to 63.1% in the first quarter of 2023, compared to 62.7% in the January-March period of 2022. The data indicate that the main long-term processes taking place in the Bulgarian economy continue and are not deeply affected by the crisis. Some of the branches of the manufacturing industry have already reached pre-crisis levels of activity. This trend does not diminish the importance of Bulgaria's industrial sector, which provides a significant percentage of added value.

The shock in industry and a large part of services was sharp, but short-lived - recovery began in the middle of 2020. Bulgarian industrial enterprises, as well as sectors of services related to industry, are included in the European and global value chains of supply and trade, which activities have been disrupted during the Covid-19 pandemic and the irregular supply of goods and services had a negative impact on Bulgarian companies. The percentage of imported value added from EU industries and from third countries in the Bulgarian industry is higher in comparison with the realization of value added in Romanian industry, which is much more from national sources.

## **2.2. National Resilience and Recovery Plan and the funding of Bulgarian industry**

On 15 October 2021, Bulgaria submitted to the Commission its National Recovery and Resilience Plan in accordance with Article 18(1) of Regulation (EU) 2021/241. The Recovery and Resilience Plans should contribute to the overall objectives of the Recovery and Resilience Facility (RRF) established by Regulation (EU) 2021/241 (hereafter "the Facility") and the European Union Recovery Instrument established by Regulation (EU) 2020/2094 of the Council to support the recovery after the COVID-19 crisis. They should promote the economic,

social and territorial cohesion of the EU, contributing to the six pillars referred to in Article 3 of Regulation (EU) 2021/241.

Under the RRF, the EU's response to the pandemic crisis, for Bulgaria was initially allocated the amount of 6267.3 EUR million in grants. The Bulgaria's National Recovery and Resilience Plan (NRRP) has an estimated cost of 6897.9 EUR million, exceeding the maximum financial contribution under the RRF, which is expected to be supplemented by national (and private) co-financing. Under the RRF Regulation, Member States can request loans under the RRF until 31 August 2023 – something that Bulgaria has not done yet.

According to the NRRP, Bulgaria ranks one of the first places (after Croatia) in terms of the share of grants in relation to the gross domestic product (GDP) — initially 10.2% of GDP for 2019, with the RRF amounting to 5.2% of the EU-27 GDP. For the financing under the RRF, obligations should be assumed by the end of 2023 and it should be paid to Bulgaria by the end of 2026. Bulgaria is among the five Member States that cannot receive 13% pre-financing.<sup>2</sup>

The NRRP aims to overcome the main challenges and systemic weaknesses of the Bulgarian economy. It is based on the national development program "BULGARIA 2030", which proposes solutions for growth and development in the medium term.<sup>3</sup> Bulgaria is one of the main beneficiaries of EU funds (measured as a share of GDP) during the 2021-2027 funding period, and with the complementarity of RRF resources, this funding is of particular relevance for several areas and especially climate changes (58.9%) and digital technological initiatives (25.8%). Thus, both minimum expenditure targets (environmental and digital) set out in the RRF Regulation have been exceeded. The NRRP consists of 12 components grouped into four policy pillars, as follows:

**Innovative Bulgaria** – (1745.5 million EUR) aimed at increasing the competitiveness of the economy and transforming it into an economy based on knowledge and smart growth.

**Green Bulgaria** – (2893.5 million EUR- 45% of the total funds) with a focus on the sustainable management of natural resources, enabling the current needs of the economy and society to be met.

**United Bulgaria** – (1262.1 million EUR) focusing on increasing the competitiveness and sustainable development of regions of the country, such as the improvement of transport and digital connectivity, as well as the promotion of local development.

**Just Bulgaria** – (996.4 million EUR) with a focus on disadvantaged people and with an emphasis on building efficient and responsible public institutions.

NextGenerationEU<sup>4</sup> is primarily aimed at improving the competitiveness of European industry. In 2020 (September) and in 2021 (May), the EC adopted a European Industrial Strategy, which aims to overcome the European companies' dependence of imports of strategic raw materials and industrial goods from third countries, to support of SMEs and start-ups and towards accelerating the ecological and digital transition.

The NRRP is focused on the decarbonization of the energy sector, sustainable agriculture, sustainable mobility (rail and public transport), modernizing the education system and infrastructure. The first pillar - "Innovative Bulgaria" aims to make a transition to a knowledge-based economy based on smart growth and to increase the competitive advantages through measures in the fields of education, digital skills, science, innovation and technology and their interconnectedness. This part of the plan has a close relation with the implementation by Bulgarian industry of the EU New Industrial Policy.

"Smart Industry" – (800.7 million EUR, 12% from the total funding) is one of the main component of the pillar "Innovative Bulgaria" and includes measures aimed at creating favorable conditions for private investment, in particular attracting industrial investment and developing industrial ecosystems, as well as helping SMEs and start-ups to upgrade their technologies and adopt green, circular and digitally oriented business practices. The investments include an economic transformation program, a business support program consisting of grants and financial instruments and a program to support the infrastructure development of industrial parks and zones.

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<sup>2</sup> A necessary condition for requesting such funding was that the Council's implementation decision be adopted by 31 December 2021.

<sup>3</sup> Economic development, demographic upsurge and reduction of inequalities. The NRRP aims to widen the scope of reforms and investments, while ensuring consistency with measures planned under the EU's cohesion policy.

<sup>4</sup> NextGenerationEU is more than a recovery plan of 806.9 billion EUR and an opportunity to implement investment projects in the framework of the European Green Deal and the digitalisation and the reform of the EU industries.

The largest part of the funding is planned for *Green Bulgaria*, namely 45% of the total. The largest number of projects will be implemented in the area of *Just Bulgaria* - a total of 28. This is also the pillar with the highest share of European funding from the total costs in the area - 83%. *Innovative Bulgaria* is the second largest pillar – over 1/4 of all, but the one with the smallest number of projects (8). In *United Bulgaria*, the state self-participation has the smallest share – 4%, with the rest being under the RRF and private co-financing. Bulgaria received the first payment under the NRRP in the amount of 1.37 billion EUR (December 2022).

**Table 1: Top ten investment projects contributing to climate and digital goals – share of the total NRRP**

Projects	Millions of EUR
Renewable energy sources	800.1
Buildings	608.2
Production of electricity from renewable sources	342.0
Railway	295.4
Digital infrastructure	269.6
Public buildings	193.1
Digital transformation of the power grid	189.2
Renovation of kindergartens	179.9
Electricity and geothermal sources	175.4
Digital skills	164.7
Share of total funds of NRRP	51.3%

Source: European Parliament (2022).

The European Commission approved the amended Bulgaria's NRRP (21 November 2023). The plan is currently worth 5.7 billion EUR in grants under the RRF. In the amended plan, Bulgaria proposed 22 measures to be removed, reduced or amended. The amended plan of Bulgaria continues to stimulate the ecological (57.5% of the funds allocated under the plan) and digital transition, and to strengthen the economic and social sustainability of Bulgaria.<sup>5</sup> The second payment under the NRRP is awaited up to the end of 2023.

A large number of EU Member States envisage using only grants, with most having submitted recovery and resilience plans underlying the necessity of receiving the full amount of EU grants under the RRF. Bulgaria is no exception.

The additional possibility of debt financing is asked by a small number of countries. The main part of the reforms is presented through the instruments for the implementation of a number of conditions (such as Change of legislation, formation of working groups and commissions, development of strategic documents, creation of administrative structures). This means that in practice, the reforms diverge from their content, and the latter in some cases it is not even clearly defined.

### 2.3. Challenges for Bulgarian industry and the EU New Industrial Policy

According to the EU New Industrial Policy, Bulgaria must implement strategic industrial projects of common European interest, which are designed to develop the timely entry into the EU market of innovative technologies and large infrastructure projects. The December 2020 proposal for a regulation of the production of batteries aims to improve turnover and resource efficiency through the recycling and recovery of strategic raw materials, to improve Europe's strategic autonomy. The minimum levels of recovered cobalt, lead, lithium, and nickel from waste for re-use in new batteries are determined.

<sup>5</sup> The Commission notes that Bulgaria's request is based on the need to take into account the downward revision of the maximum amount of grants under the RRF, from EUR 6.3 billion to EUR 5.7 billion. The revision is part of the update of the coefficient of allocation of grants under the RRF from June 2022 and reflects the comparatively better economic results of Bulgaria in 2020 and 2021 compared to the original forecasts.

Average annual industrial producer prices rise in 2022 (37.8% vs. 15.3% in 2021) considering that annual energy commodity prices increase by 135% (September 2022), which affects manufacturing capacities of Bulgarian companies. Long term structural factors continue to weigh on Bulgarian investment and industry and has an impact on the potential economic growth.

Over the past 2 years, fixed capital investment declined by a cumulative of 12.3%, with both private and public investment contributing to the decline. In addition, the limited inflow of FDI, the lag and lack of efficiency of public investments, including investments supported by EU funds, the unfavorable business environment and the excessive concentration of economic activity in one region have a negative impact on aggregate investment. Technology upgrade and transfer are hindered by the low share of public sector, of R&D expenditure. Bulgaria's productivity per hour worked is around 55% of the EU average in 2022 (PPP) (Eurostat, 2023b), there are a shortage of workers in the service sector and a necessity of wage indexation.

There is no connection between individual projects (perhaps with the exception of projects in the field of energy), which means that they were most likely developed independently and before it has been cleared the whole concept of the reforms and the development of the sectors.

The use of public procurement is the main way for the state to transparently and regulated select a contractor and spend public funds. The level of control in public procurement should be at a very high level to prevent irregularities and abusive schemes, which is often the case in Bulgaria.

Around 3/4 of the costs are construction/rehabilitation of infrastructure and physical capital (purchase of machinery and equipment). The remaining 1/4 is human capital, labor and technology. The recovery plan is effectively used as a substitute for national investment program in a number of sectors.

The postponement of reforms and projects in the second half of the plan (after 2023) may turn out to be a waste of valuable time. The Bulgarian plan is "drawn" back in time - to the point of asking whether this is a recovery plan after a severe crisis or a tool for realizing investment goals.

According the collect of data from the industry there are no clearly defined goals and indicators. The indicators are not formulated in a way that allows evaluation of the results and effects of the implementation of the projects. In conclusion, the low quality of the evaluation indicators shows weaknesses in the development of projects suitable for funding.

Even after the approval of NRRP by the European Commission, and the process of financing is starting, there are some doubts whether these funds will not become another scheme for waste and inefficient spending of money without a clear end and useful results.

The goals of the New Industrial strategy and the effective financing under NRRP can be attained with a lot of difficulties in the Bulgarian case.

Attracting quality investment in the industrial sector remains of paramount importance. The future is that Bulgaria must adapt its industry to the requirements of the New EU Industrial Strategy from 2021 and, on this basis, the funds under the NRRP should be used in the most favorable way, as well as with the financial support from the Cohesion Fund. In addition to the support from the RRF, Bulgaria benefits from EU cohesion policy funds (11 billion EUR, which represents about 13% of GDP in 2022).

The European Commission may act as a procurement entity on behalf of certain Member States for public procurement of certain goods from certain strategic industries. In December 2021, the European Commission proposed a market package for hydrogen and decarbonized gas - a key raw material for industrial processes. The package aims to strengthen energy security and global industrial leadership.

### **3. Conclusion**

The main goal of the Bulgarian NRRP is the digital transformation of industry in Bulgaria with measures to support the digitization of enterprises, improvement of competition, and the deployment of broadband access. Investments in areas such as electricity storage capacity, digitalization and sustainability of rail transport and smart water management make an important contribution to both environmental and digital transformation of the industries.

The measures in the plan also contribute to creating favorable conditions for investment in industrial parks and zones. Reforms and investments should support the improvement of the scientific research and

innovation ecosystem, thus increasing the results of innovation in Bulgaria, promoting technology transfer and commercialization of research results, which should permanently stimulate economic growth.

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