

**Va Urma** 2025



## Introduction

Romania, in common with other EU countries, faces several economic challenges. The Foreign Investors Council (FIC) believes that the recovery responses must not only focus on the immediate period ahead, but also prepare the economy of the future. Romania needs to establish and implement those strategic directions that strengthen economic growth and ensure welfare for citizens.

In 2016, the FIC started an ambitious project called VA URMA which advocates an economic model which would improve the welfare of society and position Romania in the top 10 economies in Europe by the year 2040. Achieving this goal is conditional on a change in behaviour across society and requires significant financial effort.

The adoption at European Union level of the European Ecological Pact (Green Deal), which aims to achieve climate neutrality by 2050, has reshaped the foundations on which the EU economy will develop in the future. The objective is to break the direct link between economic growth and greenhouse gas emissions.

In order to develop the "economy of the future", in 2022 the FIC published an economic growth model for Romania, which takes into account components linked to the objectives of energy transition and digital transformation.

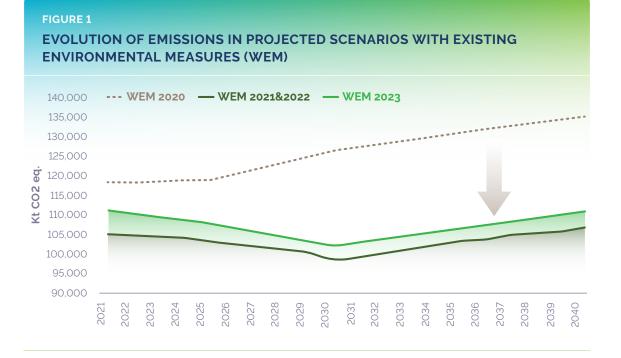
Thus, through the VA URMA model, a picture is outlined of how the Romanian economy will develop in the future, what structural changes will take place, and what growth pillars will be at the heart of it by 2040. Moreover, a fundamental element comprises an estimate of the annual need for investments in the sectors of economic activity which will help Romania pursue a sustainable convergence path in the new coordinates defined by greater attention to environmental aspects (i.e. emissions per unit of GDP created), while also managing to mitigate regional disparities, and stimulate investment, innovation, production and trade.

Moreover, in the framework of the VA URMA model, the multiple positive effects resulting from the coordination of investments can be observed regardless of their sources (public, foreign, and domestic) together with measures aimed at stimulating digitisation, robotics, technology and innovation; improving institutional capacity and state-owned companies; protecting human capital by facilitating access to employment, education and health; and transforming the energy mix in the directions set by the Green Deal at European level, as well as developing energy infrastructure.

# Changes in underlying assumptions

Compared to the initial projections in 2022, when we started our estimates of the dynamics of the Romanian economy up to the year 2040, several changes have occurred and adjusted the basic assumptions of the model as well as the estimated values of the investment needs that should be realised in order to put Romania's GDP<sup>1</sup> on a growth-friendly path.

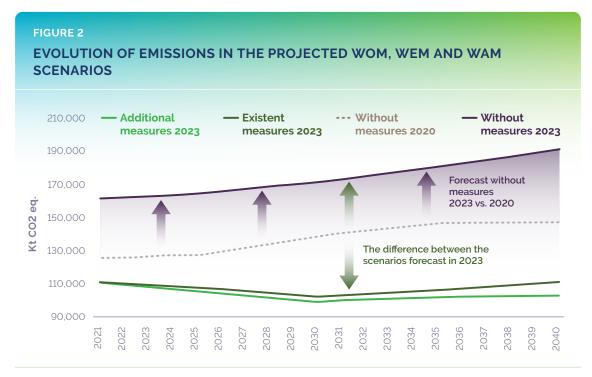
Firstly, compared to the values taken into account in the previous edition, published in 2022<sup>2</sup>, the evolution of greenhouse gas emissions projected by the European Environment Agency<sup>3</sup> has been significantly modified in all scenarios (No Action Scenario - WOM, Existing Measures Scenario - WEM, Additional Measures Scenario - WAM). The latest projections made after 2023 show a much steeper decrease in emissions in the WEM and WAM scenarios, while in the WOM scenario emissions are much higher than in the previous projection, considered in 2020. The greatest changes have occurred in the Existing Environmental Measures scenario (then also reflected in the Additional Measures scenario) but adjusted marginally upwards compared to the 2021 and 2022 projections - see Figure 1 below.



#### Source: European Environment Agency (August 2024)

- 1 Gross Domestic Product (GDP) is the total market value of final output of a defined territory (country, group of countries, region, administrative unit, etc.) in a given period. The indicator describes the economic output, activity and standard of living of the population of the country concerned for the period in question. Furthermore, it serves as an indicator that defines the size, growth or decline of an economy or economic sector.
- 2 https://vaurma.ro/wp-content/uploads/2022/02/Va-Urma-Report-2022.pdf
- 3 https://www.eea.europa.eu/ro

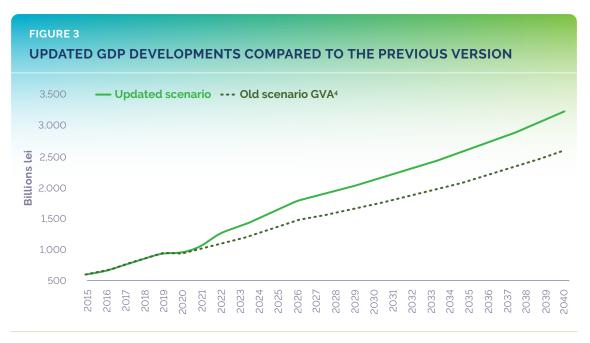
Changes have also occurred in the case of emission trends in the WOM (without measures) scenario, where the 2023 forecast shows much higher emissions compared to the 2020 forecast, while the difference between the WEM and WAM scenarios compared to the new WOM scenario is almost double, which also makes the investment effort and the sectoral adjustment of GDP much higher.



Source: European Environment Agency (August 2024)

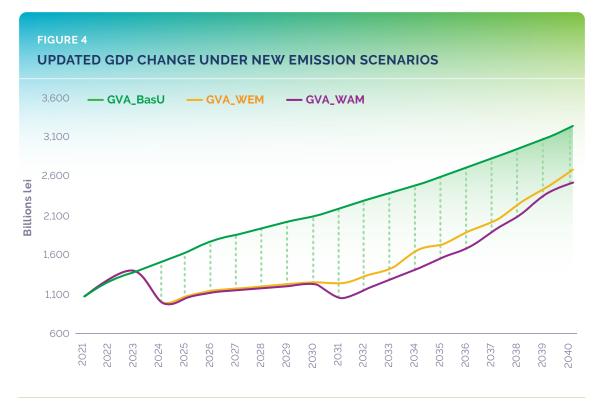
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Second, nominal GDP has been strongly boosted by the high level of the deflator (which approximates the general price level in the economy) in the years 2021-2023, which has caused the forecast of GDP in current prices to temporarily deviate from the path initially estimated in 2022. Hence, the adjustment effort will be different compared to that previously forecast.



Source: FIC, NSI and Eurostat estimates





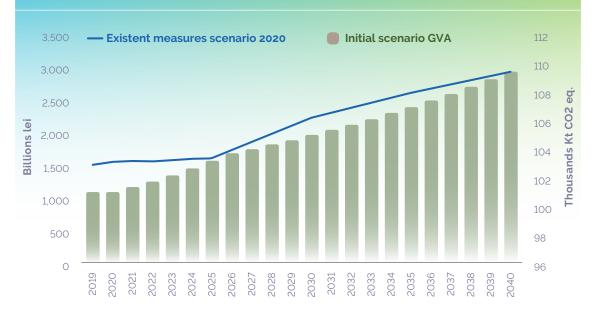
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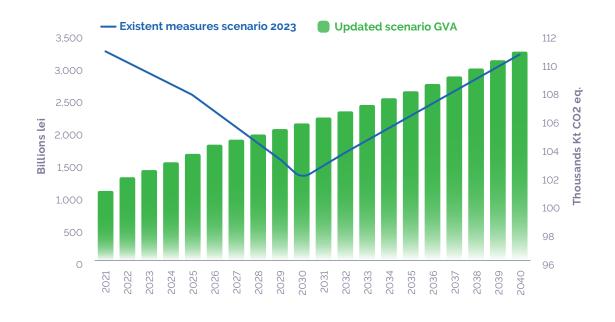
Source: FIC, NSI and Eurostat estimates

The pronounced adjustment of emissions in the existing measures scenario (WEM) developed by the European Environment Agency makes the structural changes in the economy correspondingly more important and, at the same time, the investment effort needed to generate these transformations more significant, in particular by 2030-2032, a time horizon when all available resources should be mobilised to finance investments in the economy that will generate multiplier effects and long-term sustainable economic growth in the new European paradigm.

FIGURE 5

COMPARISONS IN THE EVOLUTION OF GVA AND EMISSIONS IN THE SCENARIO WITH EXISTING MEASURES (VERSION 2020 VS. VERSION 2023)





Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

6

# GDP structure 2020-2040

From the perspective of the structure of GDP by production method, the weights for each sector have been readjusted based on national accounts data up to 2023. At the same time, the estimated values for 2040 and the intermediate ones for 2030 have been re-analysed. As in the 2022 edition, we still considered that some sectors will grow faster (such as IT&C<sup>5</sup>, public administration and financial services) while others (such as agriculture and industry) will decrease or maintain their existing level as a share of GDP, even if in nominal terms these sectors will also grow by 2030.

The structure of GDP by production method has been adjusted to reflect updated national accounts data up to 2023. These adjustments include:

- Readjusting sectoral weights: each economic sector has been re-evaluated to more accurately reflect its contribution to GDP.
- Revision of projected values: the 2040 and 2030 intermediate projections have been revised to align with new economic data and trends.

Compared to the previous edition, there are some diverging developments in the weights of certain sectors compared to what the FIC estimated as the general trend. Thus, in 2023 compared to 2020, construction, professional services and trade increased their shares in total GVA, while agriculture had a smaller share as nominal GDP grew faster. The same was the case for the arts, entertainment and recreation sectors.

At the same time, activities in public administration, defence, education, health and social work have seen their share in total GVA decrease. However, we continue to maintain the broad lines in terms of the structure of GVA and the contribution of activity sectors against the background of expected developments up to 2040, where a major role will be played by the positive dynamics of the IT&C sector, professional, administrative and support services and the transformation of the public sector.

#### TABLE 1

SHARE OF ECONOMIC ACTIVITY SECTORS IN GDP (2020-2040)

| Sectors of activity / Share  | 2020   | 2023   | 2030   | 2040   |
|--|--------|--------|--------|--------|
| Total - NACE activities <sup>6</sup>                                     | 100.0% | 100.0% | 100.0% | 100.0% |
| Agriculture  | 4.6%   | 3.9%   | 3.7%   | 3.2%   |
| Industry   | 19.7%  | 19.1%  | 20.0%  | 20.3%  |
| Construction   | 6.4%   | 7.6%   | 7.6%   | 5.3%   |
| Trade, transport, HoReCa <sup>7</sup>                                    | 20.1%  | 20.4%  | 19.8%  | 17.7%  |
| IT&C   | 6.4%   | 6.9%   | 8.0%   | 9.0%   |
| Financial services   | 2.8%   | 2.8%   | 3.5%   | 3.8%   |
| Real estate  | 7.7%   | 7.2%   | 7.3%   | 7.4%   |
| Professional, scientific, technical, administrative and support services | 7.1%   | 8.5%   | 13.8%  | 16.1%  |
| Public sector  | 13.1%  | 12.1%  | 13.5%  | 14.7%  |
| Art & more   | 2.6%   | 2.8%   | 2.8%   | 2.5%   |

Source: FIC estimates based on NSI<sup>8</sup>, Eurostat<sup>9</sup> and European Environment Agency (August 2024)

#### DEFENCE SECTOR DEVELOPMENTS

The analysis of the budget of the Ministry of National Defence for the period 2021-2026 shows a general upward trend in defence spending, both in absolute terms and as a percentage of GDP. This reflects the sustained efforts to modernise and strengthen Romania's defence capacity in an increasingly complex geopolitical and strategic context.

According to the latest fiscal-budgetary strategy prepared by the Ministry of Finance (2024-2026), published in December 2023, the Ministry of National Defence has been receiving increasing financial allocations for the period 2021-2026. It is noted that during this period total expenditure is projected to increase from 19.8 billion lei in 2021, equivalent to 1.67% of GDP, to 46.5 billion lei in 2026, representing 2.50% of GDP.

There is both an increase in expenditure on personnel, which involves a sustained effort to attract and retain qualified human resources in this essential sector, and an increase in non-financial assets, which will grow significantly, from 5.8 billion lei in 2021 to 23.45 billion lei in 2026. This increase shows the intention to make substantial allocations for investments in strategic infrastructure and advanced technologies needed to maintain and improve defence capabilities.

- 7 HoReCa is an abbreviation for Hotels, Restaurants and Catering. This term covers the entire food service and hospitality sector. I
- 8 https://insse.ro/cms/
- 9 https://ec.europa.eu/eurostat/web/main/data/database

<sup>6</sup> CAEN codes (Classification of Activities in the National Economy) are used to classify economic activities in Romania.

There are currently about 100 defence companies in Romania with private capital, and another 22 companies with state capital, according to the National Strategy for the Defence Industry 2024-2030. Supporting small and medium-sized enterprises is identified as a priority, with the aim of involving them in the development of innovative products. Targeted sectors include electronics, communications, sensors and autonomous combat vehicles, aerospace as well as naval. Investments are planned to rebuild supply chains and support the development of competitive products.

State-owned companies in the Romanian defence industry sector require significant capitalisation to be able to meet strategic and modernisation requirements. Many of the production capacities are physically and morally worn out. Their modernisation requires significant investments in modern equipment and technologies compatible with NATO standards and internationally competitive.

State-owned companies are fragmented, which reduces operational efficiency. Their consolidation, to enable the application of market economy principles, requires capitalisation for restructuring and optimisation, while the modernisation of production lines and the adoption of new technologies, including technology transfer from international partners, require substantial investments.

Some state-owned firms have also accumulated significant debts, affecting their ability to attract external financing or support large projects. According to the ??Ministry of Finance document, combined losses of state-owned companies in 2021 amounted to 165.89 million lei, indicating increased financial pressure, while debts were about twice as high compared to turnover.

To compete on international markets, state-owned companies need to develop new products and diversify their portfolio, which requires additional capital for R&D and innovation, also in line with EU-level objectives for the sector.

Even though the Strategy does not specify an exact amount for the capitalisation of state-owned companies, it involves major investments in modernisation of production lines and capacity building, such as projects for the re-technologisation of the production of modern ammunition and military technology, the development of centres of excellence for dual-use (military and civilian) maintenance and production, as well as participation in European programmes, which require significant cofinancing.

Last but not least, one direction is also aimed at stimulating investments in naval military research and naval technology by strengthening cooperation between large foreign companies with investments in Romania and in the national defence system, including by accessing European funds.

As a major source of funding, the European Commission is making almost €8 billion available for the period 2021-2027 through the European Defence Fund, with €2.7 billion allocated for collaborative defence research and €5.3 billion for collaborative capability development projects complementing national contributions.

Financial support is provided mainly through grants of up to 100% of eligible costs conditional on the activities involved and a bonus scheme that takes into account SMEs, mid-caps and the connection to a PESCO (Permanent Structured Cooperation) project.

## Change in investment effort

The figure 6 below illustrates the investment forecast for Romania until the year 2040, focusing on the additional investment effort needed to sustain economic development, and the investments required to maintain a high economic growth rate in the new context guided by sustainability, emissions reduction (reaching the net zero target in 2050 at European Union level). Data are expressed in billions of lei, and values are in current prices.

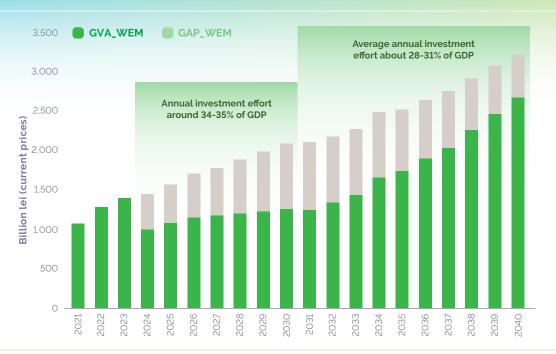
The graph shows two important ranges of investment effort:

- 1. Annual investment effort of about 34% 35% of GDP (period 2024-2030). In this period it can be observed that the required investments (marked in yellow) start to increase significantly, with massive mobilisation of financial resources. Estimates show that, by 2030, this additional investment effort will be around 33% 35% of GDP. The projections for this period suggest that Romania will require substantial additional investment to sustain economic growth and to reduce economic gaps amid the shift in the growth paradigm. Moreover, compared to the estimates in the previous edition, the additional investment needed amounts to 10% 11% of GDP over this period, mainly due to the increased ambitions to reduce emissions through existing measures (WEM scenario).
- 2. Average annual additional investment effort of around 28% 31% of GDP (period 2031-2040). From 2031 onwards, Figure 6 shows a relative stabilisation of investment needs, but still with a significant effort, estimated at between 28% 31% of GDP per year depending on the scenario. This represents a period of long-term consolidation and sustainable growth, in which the economy will be in a maturing phase, requiring moderate investment to maintain its growth momentum, while benefiting from the positive multiplier effects of earlier investment. Moreover, it is important to note that the additional investment needed compared to the previous estimate amounts to around 7% 8.5% of GDP.

This steady increase in investment flows indicates that, in order to sustain the desired economic growth while meeting the sustainability and decarbonisation criteria, Romania will have to improve its capacity to absorb and manage funds, find ways to coordinate investments from all available sources (public funds from the state budget, European funds, foreign and domestic private funds) and invest strategically in key sectors of the economy.

#### **FIGURE 6**

### ESTIMATES OF ADDITIONAL INVESTMENT EFFORT IN THE WEM SCENARIO (2024-2040)



Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

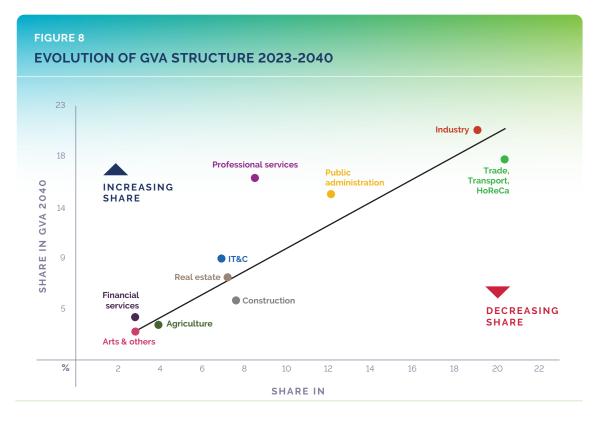
#### FIGURE 7 COMPARISONS OF ADDITIONAL INVESTMENT EFFORT BY SCENARIO UP TO 2040



Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

From the perspective of the sectoral distribution of the average annual investment needs and taking into account the dynamics of the sectors of economic activity and their contribution to the gross value added, we have calculated below how the required investments are distributed over the two scenarios for the evolution of emissions, i.e. the scenario involving existing measures (WEM) and the scenario involving additional measures (WAM). The investment multipliers for each sector were established on the basis of the literature that has calculated the multiplier effects generated by European funds among the countries of Central and Eastern Europe, considering that the values of the multipliers estimated in the study are also characteristic of the Romanian economy.

Thus, the highest investments are needed in trade, transportation, HoReCa and industry, as well as in professional, scientific, technical and administrative services, the public sector and real estate. These investments are directly correlated with the share of these sectors in GVA.



Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

Figure 9 below details the annual investment needs in Romania's economic sectors, expressed in billions of lei, in order to highlight the economic and strategic priorities aimed at modernising and increasing the competitiveness of the various economic sectors through substantial investments in digitalisation, human capital development, infrastructure and institutional capacity building.

The total investment needed to support these strategic directions amounts to around 31-32% of GDP over the period 2024-2040 in the scenario with existing measures (WEM) structured in five key intervention categories:

- Digitalization, robotics, technology, innovation;
- Institutional capacity and state-owned companies;
- Labor and human capital;
- · Energy, and infrastructure and others.

12



Each category reflects a specific need for modernisation, tailored to the challenges and requirements of each sector.

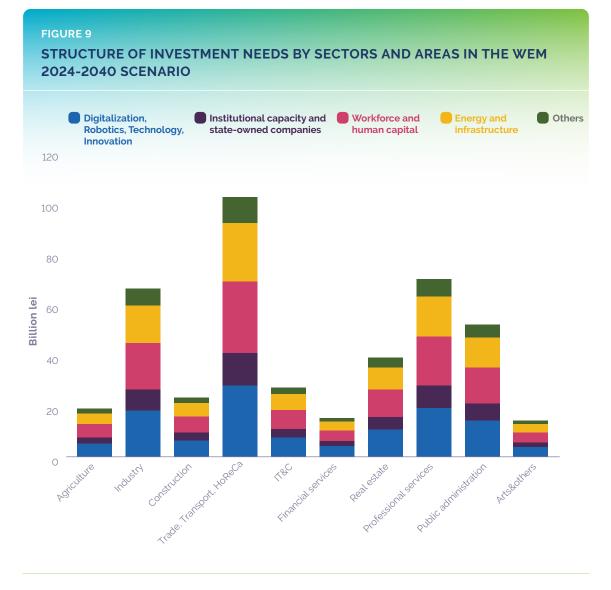
The category of digitalisation, robotics, technology, innovation is one of the central pillars of investment, accounting for 27.5% of the total average annual investment in this period. This category is particularly important in sectors such as industry, trade and transport, IT&C and the public sector. The focus on technology and innovation helps Romania to adapt to the global digital economy, given the demands for efficiency and increased competitiveness in the context of achieving net zero emission targets in 2050.

Institutional capacity and state-owned companies attract total funding of 12.5% of the total investment required. Substantial allocations to the public sector reflect the need to strengthen administrative capacity and to support state-owned companies. This can contribute to increased efficiency and transparency in public administration and stabilise key sectors of the economy. At the same time, spending on health, support for an ageing population and related social services is also having an impact.

Workforce and human capital have the same investment needs as digitisation, representing 27.5% of the total. This high share underlines the commitment to the development of human resources to ensure a skilled workforce adapted to the requirements of the labour market. Major investments in this area are essential in industry, commerce and professional services, where human capital is a key determinant of performance and productivity.

Energy and infrastructure is another significant area for investment, covering 22.5% of the total, with a role for modernising national infrastructure and adapting to energy sustainability requirements. The industry, real estate, trade and transport sectors benefit from significant investments in infrastructure, indicating a strategic effort to improve transport and energy networks to support economic development.

The distribution of investment across economic sectors also reflects distinct priorities. Industry, trade and transport are the areas with the highest investment needs, with a significant role in the national economy. Similarly, sectors such as IT&C, the public sector and professional services need considerable investment in digitisation activities in order to increase efficiency and technological capabilities in these areas. On the other hand, sectors such as agriculture, the arts and other activities require lower but sufficient investment to support digital development and the up-skilling of the workforce in these areas.



Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

In the scenario for adjustment to the greenhouse gas emissions trajectory with additional **measures (WAM)**, the average investment needs and the shares allocated to each investment pillar have been recalculated, totalling around 35% of GDP per year over the whole period 2024-2040.

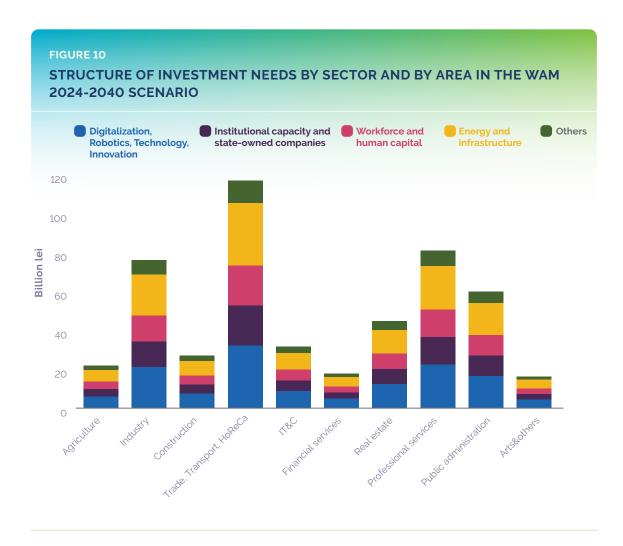
Furthermore, in this scenario (Figure 10), digitisation, robotics, technology, and innovation remain a central pillar of investment, accounting for 27.5% of the total. Industry and Trade and Transport plus HoReCa are prioritised for investment in this pillar, given the need for technological modernisation and automation to support efficiency and productivity.

Institutional capacity and state-owned companies account for 17.5% of total investments to strengthen the administrative and operational capacities of state-owned companies, as well as to optimise the performance of public institutions (administrative capacity), which are designed to support the development of critical sectors.

At a similar level, workforce and human capital attracts a 17.5% share of total investment, highlighting the need for skilled human resources and intellectual capital for the economy. The manufacturing and IT&C sectors are areas that require significant investment in human

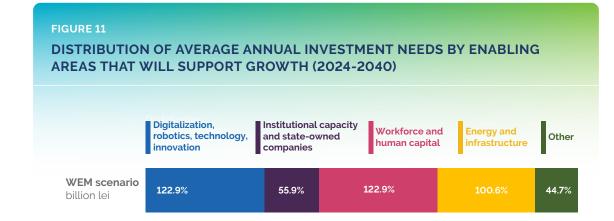
capital in this scenario in order to develop a workforce that is adapted to the challenges and ensures long-term competitiveness.

An important share in this scenario with additional measures is also allocated to energy and infrastructure; 27.5%. Industry, trade and transport, and HoReCa are the dominant sectors, due to the need to modernise infrastructure and ensure a functional, more resilient and connected energy base capable of supporting sustainable economic growth. Others, a relatively small but essential category, account for only 10% of the total.



Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

15



Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

86.4%

86.4%

49.4%

#### TABLE 2

WAM scenario

billion lei

135.8%

### STRUCTURE OF GVA OVER THE PERIOD 2023-2024 AND AVERAGE ANNUAL ADJUSTMENT

| Sectors of activity / Share                           | 2023  | 2040  | Change<br>share in GVA | Average<br>WEM<br>adjustment | Average<br>WAM<br>adjustment | Sector multiplier |
|---|-------|-------|------------------------|------------------------------|------------------------------|-------------------|
| Agriculture   | 3.9%  | 3.2%  | -0.7%                  | 24.8                         | 27.2                         | 1.25              |
| Industry  | 19.1% | 20.3% | 1.2%                   | 138.1                        | 152.5                        | 2.0               |
| Construction  | 7.6%  | 5.3%  | -2.3%                  | 48.8                         | 53.5                         | 2.0               |
| Trade, transport,<br>HoReCa                           | 20.4% | 17.7% | -2.7%                  | 133.1                        | 146.6                        | 1.25              |
| IT&C  | 6.9%  | 9.0%  | 2.1%                   | 56.9                         | 63.1                         | 2.0               |
| Financial services                                    | 2.8%  | 3.8%  | 1.0%                   | 24.1                         | 26.7                         | 1.5               |
| Real estate   | 7.2%  | 7.4%  | 0.2%                   | 50.7                         | 56.0                         | 1.25              |
| Professional,<br>scientific and<br>technical services | 8.5%  | 16.1% | 7.6%                   | 94.9                         | 105.5                        | 1.3               |
| Public sector   | 12.1% | 14.7% | 2.6%                   | 95.1                         | 105.2                        | 1.75              |
| Art & more  | 2.8%  | 2.5%  | -0.3%                  | 18.5                         | 20.3                         | 1.25              |
|   |       |       | TOTAL                  | 685.0                        | 756.8                        | 1.555             |

Source: FIC estimates based on NSI, Eurostat and European Environment Agency data (August 2024)

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