

# European Construction Sector Observatory

Country profile **Romania**

January 2022



## In a nutshell

Over the 2010-2020 period, Romania's GDP increased by 35.3%, reaching RON 836.7 billion (EUR 167.3 billion) in 2020. Compared to 2019, however, GDP declined by 3.9% in 2020. In 2021, the country's GDP is expected to grow by 7.0%.

The **number of enterprises** in the broad construction sector in Romania experienced an increase of 28.1% between 2010 and 2020, totalling 107,020 in 2020. This growth was mainly driven by the increase in the number of enterprises in the architectural and engineering activities (+47.3%), followed by the real estate activities (+38.1%), and the narrow construction sub-sector (+26.2%) sub-sectors.

Number of enterprises  
in the narrow  
construction sub-sector  
between 2010 and 2020



26.2%

The **volume index of production** in the broad construction sector saw an increase of 28.8% between 2015 and 2020. This growth was driven by the increases recorded in the volume index of production for the construction of buildings (+64.0%) and the construction of civil engineering (+4.9%) during the same reference period.

Volume index of  
production in the  
construction of buildings  
between 2015 and 2020



64.0%

**Total turnover** of the broad construction sector amounted to EUR 30.9 billion in 2018, marking a 20.9% increase compared to the 2010 level (EUR 25.5 billion). It further increased to EUR 37.6 billion in 2020, corresponding to a 47.1% increase since 2010. Growth was mainly driven by

increases in the sub-sectors, including the real estate activities (+92.6%), the architectural and engineering activities (+82.6%), the narrow construction (+41.9%) and the manufacturing (+32.0%) sub-sectors between 2010 and 2020.

Turnover in the broad  
construction sector  
between 2010 and 2020



47.1%

The **gross operating rate** of the broad construction sector, which is used to assess the profitability of the sector, stood at 19.8% in 2019, lower than the 2010 level of 19.1%. The real estate activities sub-sector remained the most profitable (52.6%) in 2019, followed by the architectural and engineering activities (21.2%), the narrow construction (15.7%) and the manufacturing (13.9%) sub-sectors.

In terms of employment, there were 611,748 **persons employed** in the Romanian broad construction sector in 2020, 3.5% above the 2010 level (591,275 persons). This growth was primarily due to 22.6%, 15.0% and 4.5% growth registered in the number of persons employed in the architectural and engineering activities, the real estate activities, and the narrow construction sub-sectors, respectively, between 2010 and 2020.

In the context of the **housing market**, residential construction remained strong and house prices were quite stable. In order to facilitate access to housing loans and stimulate the construction sector, the Romanian government has taken several initiatives, notably the First Home Programme. By the end of 2019, under the First Home Programme, more than 260,000 first time buyers were granted financial assistance worth a total of RON 24.9 billion

(EUR 5.2 billion) for the purchase or construction of housing.

As a part of its EUR 29.2 billion Recovery and Resilience Plan (RRP), the Romanian government has allocated EUR 2.6 billion for building infrastructures such as the construction of new social housing and retirement homes, hospitals and healthcare facilities, and pre-school programmes.

In terms of the **civil engineering** market, the EU has been supporting investments in Romania through the European Fund for Strategic Investments (EFSI). Total financing under EFSI amounted to EUR 1.0 billion by December 2020 and is set to trigger EUR 5.0 billion in additional investments in the country. Under the infrastructure and innovation window, 27 projects have been financed by the European Investment Bank (EIB) with EFSI backing. These projects amount to around EUR 823.0 million and are set to trigger EUR 2.7 million in total investments.

Furthermore, in March 2021 the EU announced the investment of EUR 726.0 million for the construction of the new 121 km road between the Romanian cities of Craiova and Pitești.

The Romanian RRP includes significant reforms and investments in sustainable transport. The government has allocated EUR 3.9 billion towards the modernisation of railway infrastructure, including electrification or zero-emission railways and rolling stock. It will also invest EUR 1.8 billion on green and secure urban mobility transport.

As part of the RRP, the government has planned to invest EUR 2.7 billion for the energy-efficient renovation and seismic renovation of multi-family buildings and public buildings. In the context of digitalisation, the government has allocated around EUR 1.5 billion for the digitalisation of public administration in key areas such as public procurement, skills development, employment and social protection etc.

Romania currently faces challenges in the form of high **labour shortages** in the construction sector. This is mainly due to low wages, migration to western European countries and the absence of vocational schools that could form the new generation of construction workers. This could limit the recovery and growth of the sector.

The outlook for the Romanian construction sector is positive in the medium to long term. EU led investments in infrastructure projects are expected to contribute to the growth of the construction sector.

# Table of Contents

<b>In a nutshell.....</b>	<b>2</b>
<b>1 Key figures .....</b>	<b>5</b>
Construction market.....	5
Productivity .....	6
Turnover and profitability .....	6
Employment .....	7
<b>2 Macroeconomic indicators .....</b>	<b>9</b>
Economic development.....	9
Demography and employment.....	9
Public finance .....	10
Entrepreneurship and access to finance .....	10
<b>3 Key economic drivers of the construction sector .....</b>	<b>12</b>
Business confidence .....	12
Domestic sales .....	12
Export of construction-related products and services .....	13
Access to finance in the construction sector.....	13
Access to housing .....	13
Infrastructure.....	16
<b>4 Key issues and barriers in the construction sector .....</b>	<b>18</b>
Company failure .....	18
Trade credit .....	18
Late payment.....	19
Time and cost of obtaining building permits and licenses .....	20
Skills shortage .....	21
Sector and sub-sector specific issues .....	22
<b>5 Innovation in the construction sector.....</b>	<b>23</b>
Innovation performance.....	23
Eco-innovation and digitalisation .....	23
<b>6 National and regional regulatory framework.....</b>	<b>26</b>
Policy schemes.....	26
Building regulations .....	27
Insurance and liability related regulations .....	28
<b>7 Current status and national strategies to meet Construction 2020 objectives.....</b>	<b>29</b>
TO 1 – Investment conditions and volumes .....	29
TO 2 – Skills.....	30
TO 3 – Resource efficiency / Sustainable construction .....	31
TO 4 – Single Market .....	33
TO 5 – International competitiveness .....	33
<b>8 Outlook.....</b>	<b>35</b>

## 1

## Key figures

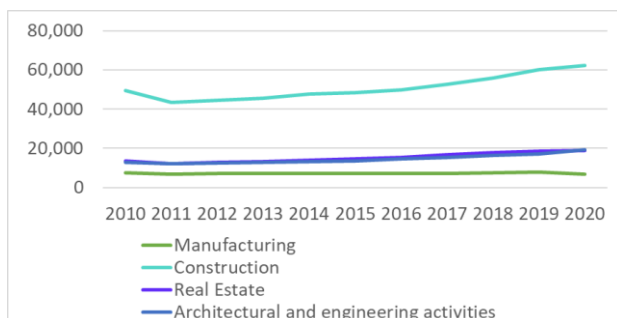
## Construction market

The **number of enterprises** in the broad construction sector in Romania totalled 107,020 in 2020, representing an increase of 28.1% over the 2010 level (83,559). The narrow construction sub-sector represented 58.2% of the total number of enterprises in 2020, followed by the architectural and engineering activities (17.9%), the real estate activities (17.5%), the and the manufacturing (6.4%) sub-sectors. Over the period 2010-2020<sup>1</sup>, the architectural and engineering activities sub-sector experienced the highest increase of 47.3%, which was followed by a 38.1% increment in the real estate activities and a 26.2% increment in the narrow construction sub-sectors. However, the manufacturing sub-sector witnessed a decline of 10.4% over the same period.

Number of enterprises in the narrow construction sub-sector between 2010 and 2020

↑ 26.2%

Figure 1: Number of enterprises in the Romanian construction sector between 2010 and 2020



Source: Eurostat, 2021.

The **volume index of production in the broad construction sector** witnessed an increase of 28.8% between 2015 and 2020. This growth was driven by the increase recorded in the volume index of production for the construction of buildings, which grew by 64.0% over the same period. Construction of civil engineering experienced a 4.9% increase in

its volume index of production between 2015 and 2020, after showing signs of recovery since 2017 (Figure 2).

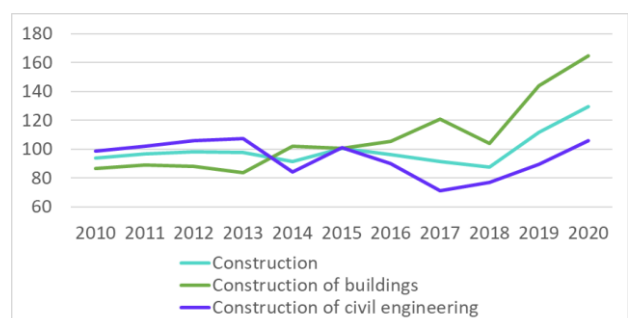
Volume index of production in the construction of buildings between 2015 and 2020

↑ 64.0%

During the March-August 2020 period, the volume of works on new construction projects rose by 2.3% compared to the same period the previous year. In contrast, the volume of capital repair works witnessed a surge of 55.0% YoY (year-on-year), followed by a 40.0% YoY rise in maintenance works. The state of emergency owing to the pandemic allowed landlords to carry out such capital works in the buildings left empty<sup>2</sup>.

In October 2021, the volume of construction works fell by 13.7% compared to October 2020. For the first ten months of 2021, the construction works index decreased by 2.0% compared to 2020<sup>3</sup>.

Figure 1: Volume index of production in the Romanian construction sector between 2010 and 2020 (2015=100)



Source: Eurostat, 2021.

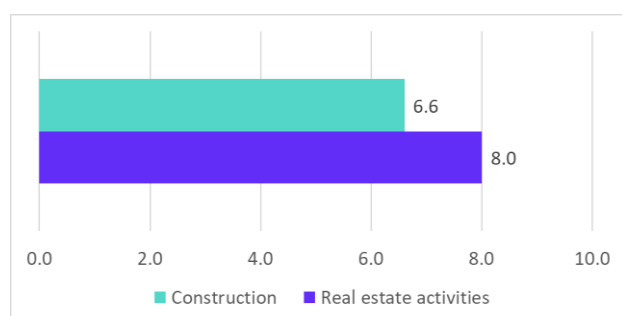
The **total added value<sup>4</sup> at factor cost** of the broad construction sector amounted to EUR 13.5 billion in 2020, with the narrow construction sub-sector accounting for the largest share (58.2%, i.e., EUR 7.9 billion). It was then followed by the real



estate activities (18.8%, i.e., EUR 2.5 billion), the manufacturing (12.0%, i.e., EUR 1.6 billion) and the architectural and engineering activities (11.0%, i.e., EUR 1.5 billion) sub-sectors. During 2010-2020<sup>5</sup>, the total value added at factor cost of the real estate activities sub-sector experienced the highest growth (+117.6%) followed by the architectural and engineering activities (+110.4%), the narrow construction (+67.2%) and the manufacturing (+22.2%) sub-sectors, over the same period.

The **share of gross value added (GVA) of the broad construction sector** as a percentage of GDP<sup>6</sup> stood at 16.2% in 2019<sup>7</sup>, below the 2010 level of 19.8%. Further, the share of GVA of the real estate activities<sup>8</sup> sub-sector in the GDP stood at 8.0% (EU-27 average 10.3%) in 2020, followed by the narrow construction sub-sector, at 6.6%, above the EU-27 average of 5.1% (Figure 2).

Figure 2: Gross value added as a share of GDP in the broad construction sector in Romania in 2020 (%)



Source: Eurostat, 2021.

Romania is statistically composed of eight NUTS-2 (Nomenclature of Territorial Units for Statistics) regions including *Nord-Vest*, *Centru*, *Nord-Est*, *Sud-Est*, *Sud*, *Bucuresti*, *Sud-Vest Oltenia*, and *Vest*. The **gross value added** was concentrated mainly in the region of Bucharest (*Bucuresti*). The top three regions in terms of GVA in the narrow construction sub-sector were *Bucuresti* (30.2%, i.e., EUR 3.4 billion), *Sud-Est* (11.4%, i.e., EUR 1.28 billion) and *Nord-Vest* (11.2%, i.e., EUR 1.26 billion) in 2018<sup>9</sup>. Further, in the real estate activities sub-sector, the top three regions were *Bucuresti* (19.7%, i.e., EUR 3.0 billion), *Nord-Est* (14.3%, i.e., EUR 2.19 billion) and *Nord-Vest* (14.2%, i.e., EUR 2.18 billion) in 2018<sup>10</sup>.

## Productivity

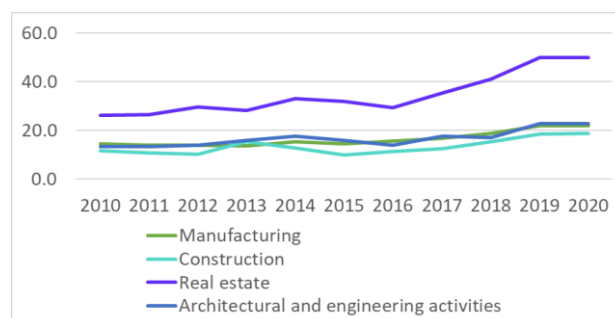
**Apparent labour productivity**<sup>11</sup> in the broad construction sector has been fluctuating since 2010,

growing from EUR 13,358 in 2010 to EUR 22,120 in 2019<sup>12</sup>, marking a significant increase of 65.6%.

With regard to the sub-sectors, labour productivity in the real estate activities sub-sector increased by 89.2% during 2010-2020<sup>13</sup>, growing from EUR 26,300 to EUR 49,760. The architectural and engineering activities sub-sector recorded a 71.1% growth in labour productivity, reaching EUR 22,755 in 2020 from EUR 13,300 in 2010. This was followed by a 59.4% rise in the narrow construction sub-sector (from EUR 11,700 to EUR 18,653) over the same period. Productivity in the manufacturing sub-sector also witnessed an increase of 49.0% between 2010 and 2020, rising from EUR 14,637 to EUR 21,810.

Apparent labour productivity in the narrow construction sub-sector between 2010 and 2020 **↑ 31.0%**

Figure 3: Labour productivity in the broad construction sector in Romania between 2010 and 2020<sup>14</sup> (EUR k)



Source: Eurostat, 2021.

## Turnover and profitability

**Total turnover** in the broad construction sector amounted to EUR 30.9 billion in 2018, registering a 20.9% increase compared to the 2010 level (EUR 25.5 billion). It further increased to EUR 37.6 billion in 2020<sup>15</sup>, corresponding to a 47.1% increase since 2010. In 2020, the largest share of the turnover came from the narrow construction sub-sector, which accounted for 65.4% (i.e., EUR 24.6 billion) of the total. It was followed by the manufacturing (15.6%, i.e., EUR 5.9 billion), the real estate activities (10.8%, i.e., EUR 4.1 billion) and the architectural and engineering activities (8.3%, i.e., EUR 3.1 billion) sub-sectors. During 2010-2020<sup>16</sup>, the real estate activities sub-sector registered the highest increase in turnover (+92.6%). It was followed by the architectural and engineering

activities (+82.6%), the narrow construction (+41.9%) and the manufacturing (+32.0%) sub-sectors.

Total turnover of the narrow construction sub-sector between 2010 and 2020

↑ 41.9%

The **gross operating surplus** of the broad construction sector increased from EUR 4.9 billion in 2010 to EUR 7.4 billion in 2019<sup>17</sup>, 51.1% higher than the level registered in 2010. The highest growth was registered by the real estate activities sub-sector (+119.0%), followed by the architectural and engineering activities sub-sector (+88.7%) and the narrow construction (+34.3%) and the manufacturing (+14.0%) sub-sectors between 2010 and 2019.

Gross operating surplus of the narrow construction sub-sector between 2010 and 2019

↑ 34.3%

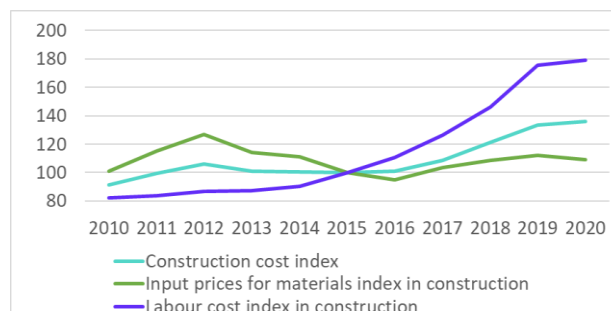
At the same time, the **gross operating rate** of the broad construction sector<sup>18</sup>, which gives an indication of the sector's profitability, stood at 19.8% in 2019<sup>19</sup>, lower than the 2010 level of 19.1%. This, nonetheless, shows recovery in the sector from the 2017 level of 11.5%. The real estate activities sub-sector remained the most profitable (52.6%) in 2019, followed by the architectural and engineering activities (21.2%), the narrow construction (15.7%) and the manufacturing (13.9%) sub-sectors.

In parallel, the **construction cost index** grew by 35.9% between 2015 and 2020. This was mainly driven by a substantial rise in labour costs (+79.3%) during the same period (following an increase in wages). The input prices for materials also increased, albeit at a slower rate of 9.3% between 2015 and 2020 (Figure 5).

Construction cost index between 2015 and 2020

↑ 35.9%

Figure 4: Construction cost index between 2010 and 2020 (2015=100)

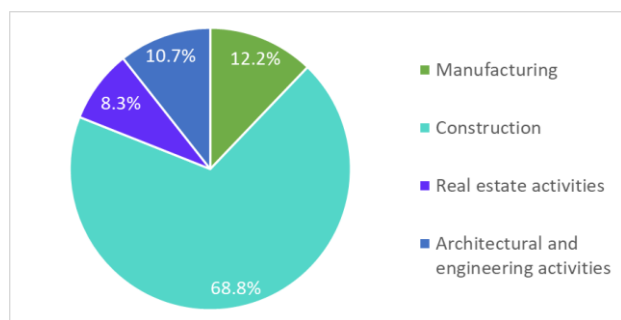


Source: Eurostat, 2021.

## Employment

In 2020, there were 611,748 **persons employed** in the Romanian broad construction sector, registering an increase of 3.5% compared to the 2010 level (591,275 persons). The narrow construction sub-sector employed 68.8% (i.e., 421,040 persons) of the total workforce in the broad construction sector in 2020. This is followed by the manufacturing (12.2%, i.e., 74,461 persons), the architectural and engineering activities (10.7%, i.e., 65,194 persons), and the real estate activities (8.3%, i.e., 51,053 persons) sub-sectors. This increase was primarily due to 22.6%, 15.0% and 4.5% growth registered in the number of persons employed in the architectural and engineering activities, the real estate activities, and the narrow construction sub-sectors, respectively, between 2010 and 2020. The manufacturing sub-sector, however, witnessed a decline of 18.0% in the number of persons employed over the same reference period (Figure 6).

Figure 5: Percentage of people employed per construction sub-sectors in Romania in 2020<sup>20</sup>



Source: Eurostat, 2021.

Number of persons employed in the architectural and engineering activities sub-sector between 2010 and 2020

↑ 22.6%

In 2019<sup>21</sup>, **SMEs** in the broad construction sector employed 87.7% of the total workforce of the broad construction sector compared to 80.1% in 2010, depicting its increasing importance in the Romanian construction sector.

With regard to the **number of persons employed regionally** in the narrow construction sub-sector in 2018<sup>22</sup>, the top three regions were *Nord-Est* (20.1%, i.e., 135,700 persons), *Bucuresti* (14.8%, i.e., 99,900 persons), and *Nord-Vest* (14.4%, i.e., 97,400 persons) and. For the real estate activities sub-sector, the top three regions in 2018 were *Bucuresti* (38.7%, i.e., 9,900 persons), *Nord-Est* (16.8%, i.e., 4,300 persons) and *Nord-Vest* (16.0%, i.e., 4,100 persons).

As for **employment by specific occupation**, the number of professionals in the manufacturing sub-sector rose by 26.5% between 2010 and 2020, followed by workers in elementary occupations (+17.3%) and service and sales workers (+17.1%). The employment of managers declined considerably by 46.8%, and technicians and associate professionals witnessed a 24.2% downfall over the same period. In the narrow construction

sub-sector, the largest increase was seen in the number of workers in elementary occupations (+67.4%) between 2010 and 2020, while demand for technicians and associate professionals registered a decline of 45.3%, followed by a 35.1% and 34.9% downfall in the employment of managers and clerical support workers, respectively, over the same reference period. Demand for technicians and associate professionals in the real estate activities sub-sector<sup>23</sup> increased by 12.3% between 2010 and 2020.

Number of workers in elementary occupations in the narrow construction sub-sector during 2010-2020

↑ 67.4%

In addition, the **number of self-employed workers**<sup>24</sup> in the narrow construction sub-sector declined by 1.5% between 2010 and 2020, representing 14.0% of the total of self-employed persons in the general economy. This is higher than the EU-27 average of 11.7% and 2010 level of 10.5%. Similarly, there was 22.7% fall in the number of self-employed workers in the manufacturing sub-sector over the 2010-2020 period, representing 2.6% of total self-employed persons in the general economy. This was higher than the 2010 level of 2.5%.

In addition, **full-time employment** in the narrow construction and the real estate activities sub-sectors increased by 14.4% and 8.7%, respectively, while the manufacturing sub-sector grew by 0.7% over the 2010-2020 period. In contrast, **part-time employment** in the narrow construction sub-sector registered decline of 16.5% between 2010 and 2020, and there was a 35.3% downfall, recorded in the manufacturing sub-sector<sup>25</sup> over the 2010-2020 period.

Part time employment in the narrow construction sub-sector between 2010 and 2020

↓ 16.5%



## 2

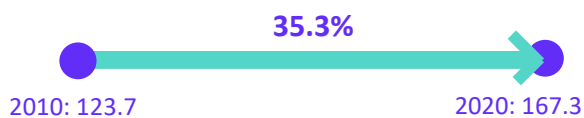
# Macroeconomic indicators

## Economic development

In 2020, Romanian GDP increased by 35.3%, from RON 618.5 billion (EUR 123.7 billion) in 2010 to RON 836.5 billion (EUR 167.3 billion). However, it witnessed a decline of 3.9%, from 2019.

The downfall was primarily stimulated by the outbreak of the global COVID-19 pandemic and the subsequent lockdown measures undertaken by the government. **Potential GDP** in 2020 was RON 886.5 billion (EUR 177.3 billion), resulting in a negative **output gap** of 5.6%. In 2021, Romanian GDP is expected to grow by 7.0% YoY, reaching RON 894.9 billion (EUR 179.0 billion).

Romanian GDP over 2010-2020 (EUR billion)



After witnessing negative inflation (deflation) in 2015 and 2016, the **inflation rate** turned positive in 2017 and stood at 2.3% in 2020.

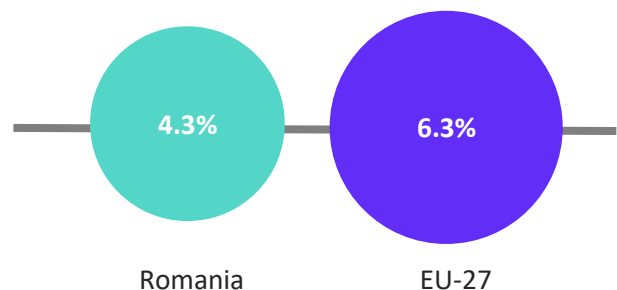
## Demography and employment



In 2020, the average unemployment rate (between 25-64 years) in Romania stood at 4.3%, 1.5 percentage points below the 2010 level of 5.8%. This was also well below the EU-27 average of 6.3%.

Similarly, the **youth unemployment rate** (below age of 25 years) stood at 17.3% in 2020. Although this was better than the 2010 level of 22.1%, it was slightly higher compared to the EU-27 average of 16.8% in 2020.

Unemployment rate in Romania (25 – 64 years) and the EU-27 in 2020



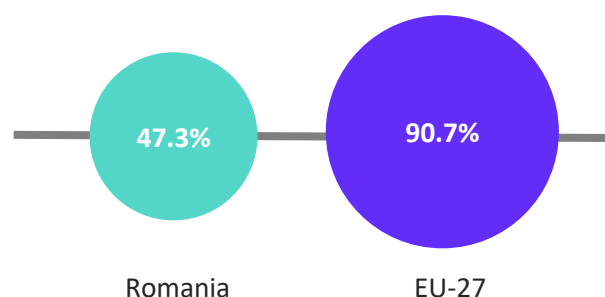
In terms of demography, the **total population** in Romania amounted to 19.3 million in 2020, representing a decline of 4.8% over the 2010-2020 period. It is expected to decline further by 7.6% by 2030 (17.8 million people), and by 12.9% by 2050, reaching 15.5 million people. This decline is partly explained by outward migration. **Net migration** remained negative throughout the decade despite improving by 53.5% from -48,100 in 2010 to -22,364 in 2020. This has further intensified the problem of labour force and skill shortages and mismatches in the country.

Meanwhile, the **working age population** in Romania made up 65.4% of the total population in 2020, slightly above the EU-27 average of 64.3%. However, by 2050, the share of the working age population is expected to decline to 56.1% and people aged 65 or above will make up 30.6% of the overall population. This shift in population structure will drive demand for hospitals and elderly care buildings and infrastructures, which in turn may generate more opportunities for the Romanian construction sector.

## Public finance

In 2020, **general government expenditure** represented 42.3% of GDP (40.0% in 2010), well below the EU-27 average of 53.4%. **General government gross debt** amounted to 47.4% of GDP in 2020 (29.6% in 2010), significantly below the EU-27 average of 90.7%. Meanwhile, the **general government deficit** stood at -9.4% of GDP in 2020, compared to -6.9% in 2010. This was also above the EU-27 average of -6.9% in 2020.

General government gross debt as a percentage of GDP (2020)



## Entrepreneurship and access to finance

According to the World Bank Doing Business 2020 report, Romania ranked 91<sup>st</sup> out of 190 countries in ease of starting a business in 2019<sup>26</sup>. This is an improvement in comparison with previous year's ranking (111<sup>th</sup>)<sup>27</sup>.

As per the report, starting a business in Romania requires 6 procedures, taking 20 days and costing 0.3% of income per capita<sup>28</sup>. In terms of entrepreneurship, 33.3% of the Romanian adult population perceive that there are good opportunities in starting a firm in the country, and 29.0% of the adult population, currently not involved in entrepreneurial activities, intended to start a business in the coming three years<sup>29,30</sup>.

According to the 2019 Small Business Act (SBA) Fact Sheet<sup>31</sup>, Romania performs above the EU-28<sup>32</sup> average in **entrepreneurship**. The country scores very high on indicators such as adults intending to start a business in the next three years, high job creation expectation rate and entrepreneurship as a desirable career choice, as well as high media attention given to successful entrepreneurs. However, when it comes to share the of high growth enterprises and opportunity-driven entrepreneurial

activity, Romania's performance stood well below the EU-28 average.

Romania introduced three new initiatives recently to boost entrepreneurship in the country, in addition to programmes already in place, such as Start-up Nation, Diaspora Start-up and Micro-industrialisation<sup>33</sup>:

- The Ministry of Business Environment, Commerce and Entrepreneurship implemented the **'Developing entrepreneurship among women in small and medium-sized enterprises'** measure to stimulate entrepreneurship among women through information services and imparting training in entrepreneurial skills.
- To enhance the visibility of entrepreneurship in higher education institutions through training in entrepreneurship skills, knowledge exchange and entrepreneurship support, a measure **'Evaluating innovative entrepreneurial potential of higher education institutions'** was implemented by the Ministry of National Education.

The National Centre for the Development of Vocational and Technical Education launched the **'National Business Plans Competition'** measure aimed at developing the entrepreneurial skills of students at local, regional and national levels.

According to the 2021 SME fact sheet, Romania introduced a reform: voluntary value added tax registration which is less time consuming than mandatory registration making it easier to do business. Policymakers also specifically target young people through the programme 'INNOTECH Student' – launched in 2020 – which offers Romanian college students financial support to carry out their entrepreneurial projects<sup>34</sup>.

In 2020, the COVID-19 pandemic had an impact on Romanian SMEs leading to a drop in the SME value added by 0.5%, whereas employment increased by 1.1%. However, with the government taking numerous policy measures to support the economy, these indicators are forecast to partially recover with SME value added and employment to grow by 6.3% and 1.1%, respectively, in 2021<sup>35</sup>.

Due to the COVID-19 crisis, over 100,000 SMEs needed support during 2020. To activate the economy, the Romanian government published its National Plan for Investment and Economic Recovery. This proposed investments worth EUR 100.0 billion be made until 2030 in various sectors<sup>36</sup>.

Loans to non-financial corporations increased by 18.5%, from RON 104.6 billion (EUR 20.9 billion) in 2010 to RON 123.9 billion (EUR 24.8 billion) in 2020.

Loans to non-financial  
corporations between  
2010 and 2020

 **18.5%**

**As per the World Bank Doing Business 2020 report, in terms of access to finance Romania ranked 25<sup>th</sup> out of 190 countries for the ease of getting credit<sup>37</sup>.**

To increase SME access to loans and guarantees from 2014-2020, Romania received EUR 30.8 billion from the European Structural and Investment Funds

(ESIF), of which 5.3% was allocated to thematic objectives supporting SMEs through two operational programmes – the Competitiveness Programme and the Regional Programme amounting for approximately EUR 1.64 billion. An additional EUR 550.0 million has been mobilised under the European Regional and Development Fund (ERDF) for financial support to SMEs through the provision of working capital and capital for productive investments<sup>38</sup>.

To improve the economic competitiveness and strengthen the market position of SMEs, the Romanian government is trying to improve access to finance with several financial support schemes. For example, the National Credit Guarantee Fund for SMEs, together with the Ministry of Public Finance, designed three new programmes to help SMEs overcome the economic consequences of the pandemic. These are SME INVEST Romania; SME Leasing of equipment and machinery; and SME Factor<sup>39</sup>.

## 3

## Key economic drivers of the construction sector

### Business confidence

In 2020, all the confidence indicators lay in negative territory, with the industry confidence and construction confidence indicators having the highest deterioration from the previous year. However, all the confidence indicators have shown significant signs of improvement since 2010.

The **consumer confidence** indicator increased from -43.7 in 2010 to -12.8 in 2020. This stands above the 2020 EU-27 average of -14.6. Similarly, the **industry confidence** indicator slightly improved from -8.4 in 2010 to -8.1 in 2020, above the EU-27 2020 average of -14.4. Finally, the **construction confidence** indicator experienced an improvement over the period, reaching -14.8 in 2020, up from -40.8 in 2010, while the EU-27 average in 2020 stood at -9.3.

Mirroring this increased confidence, the **investment ratio** rose from 23.4% in 2019 to 26.0% in 2020. It also remains 1.0 percentage points (pp) above the 2010 level of 25.0%.

In parallel, **investment per worker** increased by 84.4% in 2019<sup>40</sup>, reaching EUR 34,516 compared to EUR 18,716 in 2010. Following the uptrend, in terms of sub-sectors, investment per worker in the real estate activities sub-sector registered the highest increase of 153.9% between 2010 and 2019<sup>41</sup>, reaching EUR 78,700 from EUR 31,000 over the period. This was followed by the narrow construction sub-sectors, rising by 57.9% over the same period, reaching EUR 12,000 in 2019 from EUR 7,600 in 2010. In contrast, investment per worker in the architectural and engineering activities reduced by 5.6% during the same reference period, from EUR 3,600 to EUR 3,400.

### Domestic sales

The ranking of the **most domestically sold construction products** changed considerably over the 2010-2020 period. 'Portland cement, aluminous cement, etc.' continued to represent the highest share of the domestic sales, witnessing a growth of 37.3% over the 2010-2020 period. However, the largest increase in sales was recorded for the product category 'Pallets, box pallets and other load boards of wood', rising by 297.2% between 2010 and 2020 and accounting for EUR 46.1 million in 2020. This was followed by a 173.4% rise in 'Other worked ornamental or building stone etc.' over the same period accounting for EUR 54.7 million in 2020. Both these product groups together accounted for only 2.7% of the total construction product sales value sold domestically. Notably, there was a 74.4% decline in the sales of 'Towers and lattice masts of iron or steel' between 2010 and 2020. The top five most domestically sold construction products in Romania, accounting for 58.1% of the total construction products sold domestically in 2020, are presented in the table below (Table 1), including a comparison with the most sold products in the EU-27 region.

Table 1: Five most domestically sold construction products in Romania and in the EU in 2020

Romania				EU-27
	Product	Value (EUR m)	Share in construction product domestic sales (%)	Product
1	Portland cement, aluminous cement, etc. (group 235112)	681.1	18.1	Other structures and parts of structures, etc. (group 251123)
2	Ready-mixed concrete (group 236310)	472.9	12.6	Ready-mixed concrete (group 236310)
3	Prefabricated buildings of metal (group 251110)	445.6	11.9	Doors, windows and their frames (group 251210)
4	Tiles, flagstones, bricks and similar articles of cement etc (group 236111)	297.7	7.9	Prefabricated buildings of metal (group 251110)
5	Other structures and parts of structures, etc. (group 251123)	284.0	7.6	Prefabricated structural components for building, etc. (group 236112)

Source: PRODCOM, 2021.

## Export of construction-related products and services

The ranking of the **most exported construction products** has experienced some fluctuations since 2010. 'Builders' joinery and carpentry, of wood, n.e.c.' experienced a remarkable growth of 372.8% over the 2010-2020 period and was even on the list of the top five most exported construction products from the country. However, between 2010 and 2020, the largest increase was recorded in the product category 'Assembled parquet panels' (+433.6%), accounting for EUR 30.7 million in 2020, followed by 'Doors, windows and their frames etc.', which rose by 178.7% over the same period and accounted for EUR 44.6 million in 2020. Notably, both these product groups did not make to the top five list and contributed only 6.2% of construction exports, taken together. The top five most exported construction products from Romania and the EU-27

are summarised in Table 2. Together, these accounted for 47.2% of all construction products exports in 2020.

Table 2: Five most exported construction products in Romania and in the EU in 2020

Romania				EU-27
	Product	Value (EUR m)	Share in construction exports from country in 2017 (%)	Product
1	Fibreboard of wood, etc. (group 162115)	137.3	11.3	Ceramic tiles and flags (group 233110)
2	Oriented strand board (OSB) (group 162113)	131.1	10.8	Other structures and parts of structures, etc. (group 251123)
3	Builders' joinery and carpentry, etc. (group 162319)	111.9	9.2	Fibreboard of wood, etc. (group 162115)
4	Particle board (group 162112)	109.8	9.0	Doors, windows and their frames (group 251210)
5	Wooden frames for paintings, photographs etc (group 162914)	83.4	6.9	Builders' joinery and carpentry, etc. (group 162319)

Source: PRODCOM, 2021.

In terms of the **cross-border provision of construction services**<sup>42</sup>, Romania exported EUR 504.8 million of construction services worldwide in 2020, marking a 19.2% increment as compared to the 2013<sup>43</sup> level (EUR 423.4 million). Similarly, the country imported EUR 64.8 million worth of construction services from across the globe in 2020, a significant decline of 68.1%, compared to the 2013<sup>44</sup> level of EUR 203.4 million. In particular, 93.4% (i.e., EUR 60.7 million) of total imports in 2020 came from the EU-27 countries. Thus, Romania generated a **trade surplus** of EUR 440.0 million in 2020.

## Access to finance in the construction sector

According to the **2021 Survey on the Access to Finance of Enterprises (SAFE) report**, around 36.9%



of small and medium enterprises (SMEs) in Romania reported bank loans as being relevant, below the EU-27 average (45.7%). 11.5% of the SMEs reported using bank loans recently (between April 2021 and September 2021), below the EU-27 average (14.2%). During the same period, 20.2% of SMEs in Romania applied for a bank loan, below the EU-27 average of 21.3%. 10.3% of SMEs in Romania did not apply for bank loans fearing rejection, well above the EU-27 average (4.7%). 36.6% of SMEs did not apply for bank loans because of sufficient internal funds, lower than the EU-27 average (47.7%)<sup>45</sup>. Out of those who applied for a bank loan, 52.0% received everything they requested, which is below the EU-27 average of 71.3%.

The availability of bank loans during April to September 2021 for SMEs in Romania also changed. 16.9% of SMEs opined that the availability of bank loans improved for the period, above the EU-27 average (15.6%). 14.0% of SMEs mentioned that it has deteriorated, above the EU-27 average (10.1%). However, 45.9% of SMEs believe that the availability of bank loans remains unchanged, below the EU-27 average (64.0%)<sup>46</sup>.

The requirement of bank loans between April and September 2021 increased for 30.1% of SMEs in Romania, well above the EU-27 average (18.1%). Over the same period, the requirement of bank loans decreased for 11.2% of SMEs, below the EU-27 average (15.7%). 57.0% of SMEs also reported that their requirement for bank loans remained unchanged over the same period, below the EU-27 average (65.4%)<sup>47</sup>.



As per the EIB Investment Survey (EIBIS) for 2021, 15.0% of firms in the Romanian construction sector were dissatisfied with the cost, 12.0% with the collateral and 1.0% with the amount of financing<sup>48</sup>.

As per the survey, 12.0% of all Romanian firms could be considered as financially constrained, well above the EU-28<sup>49</sup> average of 5.0%. The share was 17.0% for firms in the construction sector while it stood at 19.0% for SMEs. The report further stated that the availability of finance is considered as a long-term barrier to investment by 68.0% of the firms in the construction sector<sup>50</sup>.

Between 2010 and 2020, **credit extended to the narrow construction** sub-sector decreased from RON 304.5 billion (EUR 60.9 billion) to RON 281.7 billion (EUR 56.3 billion), marking a decline of 7.5%. However, it witnessed a 5.1% increase from 2019.

Credit extended to the narrow construction sub-sector 2010 and 2020

↓ 7.5%

The Romanian government adopted a state aid scheme for supporting the activity of SMEs during the COVID-19 pandemic. With a budget of RON 781.0 million (EUR 164.0 million), the aid scheme provides measures to guarantee loans and subsidised interest rates, as well as the fees related to SMEs through FNGCIMM (*Fondul National de Garantare a Creditelor pentru Intreprinderile Mici si Mijlocii* - National Credit Guarantee Fund for SMEs). This scheme guarantees 80.0% to 90.0% of investment loans and/or working lines to finance the working capital needs of SMEs. The maximum threshold of guaranteed financing that can be granted to a beneficiary for making investments is RON 10.0 million (EUR 2.1 million) and for working capital is RON 5.0 million (EUR 1.1 million)<sup>51</sup>.

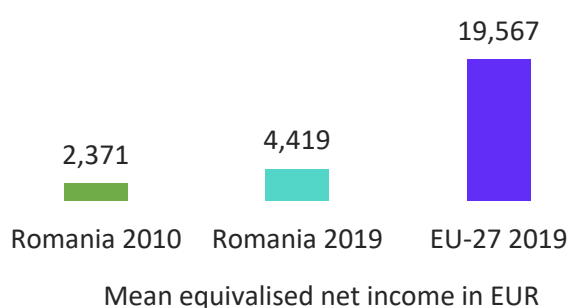
In April 2020, the European Commission approved a RON 16.0 billion (EUR 3.3 billion) Romanian scheme to support SMEs affected by the coronavirus outbreak. Under the scheme, support will be granted in the form of direct grants and state guarantees for investment and working capital loans. This will help SMEs cover their immediate working capital or investment needs<sup>52</sup>.

In December 2021, the Black Sea Trade and Development Bank (BSTDB) provided a EUR 40.0 million SME Facility to Garanti BBVA Romania to expand support for SMEs in the country and help them sustain their business under the challenging conditions caused by the COVID-19 pandemic<sup>53</sup>.

The five-year loan will fuel the investment programmes and working capital needs of businesses, promoting exports and facilitating the private sector growth and employment in the country.

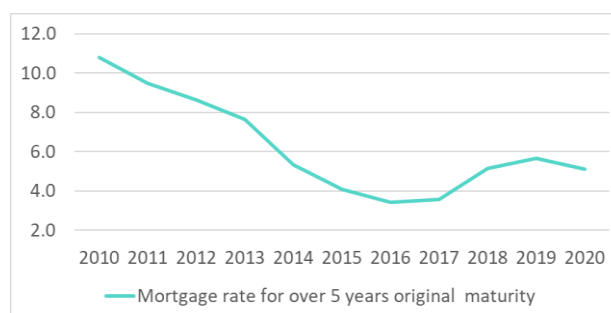
## Access to housing

The **number of households** in Romania increased slightly by 1.6%, from 7,402,200 in 2010 to 7,518,200 in 2020. While in 2010, the share of **population living in densely populated area** stood at 36.4%, it declined to 29.4% in 2020. The share of the population living in intermediate urbanised areas went up significantly to 27.8% from 1.1% over the same period, reaching the highest level in the decade. Meanwhile, the **mean equivalised net income** has grown consistently since 2010, reaching EUR 4,419 in 2019, while the EU-27 average stood at EUR 19,567. It further increased to EUR 4,846 in 2020, marking a substantial growth of 104.4% as compared to the 2010 level of EUR 2,371.



In addition, **interest rates on mortgages** (for loans over five years of original maturity) have been declining since 2010 (10.8%) to reach 5.1% in 2020 (Figure 7). Consequently, total **outstanding residential loans to households** experienced a significant growth of 151.4% between 2010 and 2019<sup>54</sup>, rising from EUR 6.8 billion to EUR 17.0 billion. This was also the result of policy schemes such as the First Home Programme launched way back in 2009. The mortgage loans granted under this government sponsored programme represented one third of the new housing loans in the first quarter of 2019<sup>55</sup>.

Figure 6: Mortgage rates for loans for over 5 years original maturity (%)



Source: ECB MFI Interest Rate Statistics, 2021.

The **house price index** of total dwellings has been increasing gradually since 2015, witnessing a 28.4% growth between 2015 and 2020. This was led by a 31.2% and 16.4% rise in the house price index of existing and new dwellings, respectively, over the same period (Figure 8). This increase was fuelled by a rise in disposable income and public support measures such as the *Prima Casa* (First Home) programme, and a reduction in the VAT rate to 5.0% for second-home purchases. Moving forward, growth in the sector is estimated to continue<sup>56</sup>. In parallel, the rental price index for housing experienced a steady increase over recent years, rising by 10.1% between 2015 and 2020. This price increase was to some extent mitigated by the increase in housing supply.


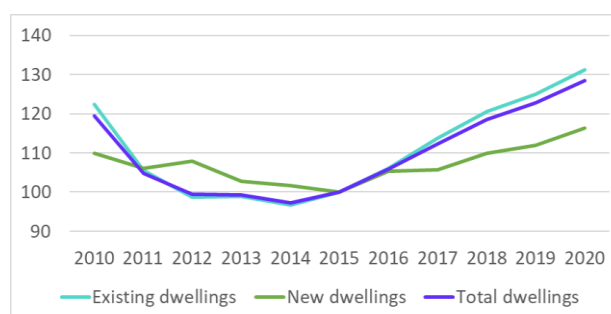
House price index for existing dwellings between 2015 and 2020  **31.2%**

Figure 7: House price index in Romania between 2010 and 2020 (2015=100)



Source: Eurostat, 2021.

The **building permits index** for residential dwellings increased by 5.6% between 2015 and 2020. With regard to single-dwelling building permits, there was a 4.5% increase over the same period. The highest increment was noted in building permits for

two and more dwellings building, rising by 21.9% between 2015 and 2020.

Building permits index for two and more dwellings between 2015 and 2020



21.9%

**In 2020, demand for housing remained strong with a fall in construction activity. According to the National Agency for Cadastre and Land Registration (ANCP), the total number of properties sold nationwide increased by 11.6% y-o-y to 602,625 units in 2020. Whereas the total number of residential building permits in Romania fell by 2.9% to 41,311 units in 2020, according to the National Institute of Statistics (INS)<sup>57</sup>.**

During January to September 2021, 39,114 building permits for residential projects were issued in Romania, up 27.8% year-on-year, according to INS. In September 2021, 4,899 building permits were issued compared to 4,289 building permits issued in September 2020, an increase of 14.2%<sup>58</sup>.

The **home ownership rate** in Romania is among the highest in the EU region, with as high as 96.1% of the **building stock** being owner-occupied in 2020. Only 3.9% of building stock was occupied by rental tenants in 2020 compared to 2.4% in 2010. This can be partly attributed to lower interest rates, rising household income and other state policies favouring home ownership. At the same time, the home ownership rate of the population earning **above 60.0% of the median equalised income** stood at 96.6% in 2020 compared to 97.8% in 2010. Similarly, the home ownership rate for the population earning **below 60.0% of the median equalised income** stood at 94.3% in 2020, below the 2010 level of 96.6%.

In 2020, the **overcrowding rate**<sup>59</sup> in Romania stood at 45.1%<sup>60</sup>, the lowest level recorded since the peak of 53.4% in 2009. This was more than double the EU-27 average of 17.8% in 2020. The **severe housing deprivation rate**<sup>61</sup> stood at its lowest level for the decade, at 14.2%<sup>62</sup> in 2019, though significantly surpassing the EU-27 average of 4.0%. In 2020, it slightly rose to 14.3%. Such a high deprivation rate has led to problems of homelessness and social exclusion in the country. Lastly, the **housing cost overburden rate**<sup>63</sup> has been falling since its peak in 2012 (18.4%) and stood at 7.1% in 2020, below the EU-27 average of 9.9%<sup>64</sup>.

## Infrastructure

**As per the 2019 Global Competitiveness Report, Romania ranked 55<sup>th</sup> out of 141 economies in terms of infrastructure<sup>65</sup>.**

As per the report, the overall ranking of Romania was 61<sup>st</sup> out of 141 economies, exclusively in the context of transport infrastructure. With a ranking of 19<sup>th</sup>, it performed particularly well in terms of railroad density. It ranked 55<sup>th</sup> in terms of road connectivity, 57<sup>th</sup> with regard to airport connectivity and 58<sup>th</sup> in linear shipping connectivity. In terms of efficiency of services, it ranked 71<sup>st</sup> in air transport services and 76<sup>th</sup> for train services. Romania performed particularly poorly with regard to the quality of road infrastructure with a rank of 119<sup>th</sup><sup>66</sup>. The country's road density in 2019<sup>67</sup> reached 4.0km/km<sup>2</sup> in 2019. It increased by 300.0% from 1.0 km/km<sup>2</sup> in 2010. Its rail density decreased by 4.3%, reaching 45.0km/km<sup>2</sup> in 2019 from 47.0km/km<sup>2</sup> in 2010.

The condition and reliability of transport infrastructure in Romania remained poor and also below its peers and EU-28<sup>68</sup> average. The TEN-T road network has not yet been completed and is missing the cross-Carpathian connection. Owing to the lack of adequate transport infrastructure, certain regions such as the *Nord-Est* and *Sud-Vest Oltenia* are rather isolated. Insufficient upgrades and maintenance have also resulted in reduced train speed and affected delivery times. Although in the National Reform Programme 2019 foresaw an increase of the share of rail compared to road transport, this has yet to materialise<sup>69</sup>.

**Under the Strategy for Railway Infrastructure Development 2019-2023, a total of EUR 12.8 billion is needed over the next five years to develop the railway infrastructure in Romania<sup>70</sup>.**

In December 2021, the Ministry of Transport and Infrastructure (MTI) approved the investment plan for the development of the national transport infrastructure over the period 2020 - 2030. The total financing is estimated at around EUR 72.8 billion over the next decade. Of that amount, EUR 34.2 billion is dedicated to road infrastructure, EUR 20.6 billion to railway infrastructure, EUR 10.7 billion to metro infrastructure, EUR 4.46 billion to naval

infrastructure and EUR 2.79 billion to dedicated to airport infrastructure<sup>71</sup>.

In March 2021, the European Commission approved the construction of an express road between the cities of Craiova and Pitești, in Romania. The EU will contribute with EUR 726.0 million to the new 121 km connection between the two cities. The project is part of the Trans-European Transport Network and includes two lanes running in each direction, 10 interchanges, and 75 bridges or passages. It is expected to be completed by 2023<sup>72</sup>.

**The Recovery and Resilience Plan of Romania includes significant reforms and investments in sustainable transport. The government has allocated EUR 3.9 billion towards the modernisation of railway infrastructure, including electrification or zero-emission railways and rolling stock. It will also invest EUR 1.8 billion on the green and secure urban mobility transport<sup>73</sup>.**

These investments will contribute to improving Romania's connectivity and the attractiveness and sustainability of its transport system, as well as increasing the use of public transport by citizens. Proposed reforms and investments related to the greening of road transport operations, in particular vehicle taxation and EV charging stations, will likely contribute to a more sustainable transport sector in Romania<sup>74</sup>.

## 4

## Key issues and barriers in the construction sector

### Company failure

**Business demography** in the Romanian broad construction sector witnessed substantial improvement over the 2010-2019<sup>75</sup> period, with the number of company births rising and company deaths falling simultaneously. In fact, **company births** in the architectural and engineering activities sub-sector experienced the highest growth of 260.2%, rising from 638 in 2010 to 2,298 in 2019. Similarly, company births in the narrow construction and the real estate activities sub-sectors grew by 172.3% and 129.9%, respectively, during the same period, reaching 12,416 and 2,200 in 2019.

Company births in the narrow construction sub-sector between 2010 and 2019

↑ 172.3%

In parallel, all three sub-sectors registered declines in the number of **company deaths** between 2010 and 2018<sup>76</sup>. The architectural and engineering activities sub-sector, again, recorded the largest decline of 31.7% in the number of company deaths (from 2,596 in 2010 to 1,772 in 2019). Similarly, company deaths in the real estate activities and the narrow construction sub-sectors decreased by 21.3% and 11.4%, respectively, reaching 1,576 and 8,895 in 2019.

Company deaths in the narrow construction sub-sector between 2010 and 2019

↓ 11.4%

As in most EU countries, the economic impact of the COVID-19 pandemic was an unwanted stress for the companies in Romania. The adverse consequences

became apparent early in 2021 as the number of new insolvency requests increased. For instance, in the first half of 2021, 55,906 companies stopped operating in Romania, 31% more compared to the same period last year. At the same time, the number of newly registered companies rose to 79,734, of which LTD (limited company) accounted for 53,844, 58% more than the same period of the previous year, which was the largest in the last 10 years. This dynamic reflects that the rapid economic recovery is driving the emergence of new businesses that are trying to seize opportunities in the face of uncertain business conditions<sup>77</sup>.

In the first half of 2021, most bankruptcies were recorded in the construction sector (542), followed by retail (455), wholesale and distribution (409)<sup>78</sup>.

### Trade credit

According to the Survey on the Access to Finance of Enterprises (SAFE) 2021 report, trade credit constituted a relevant source of financing for 34.0% of Romanian SMEs, higher than the EU-27 average of 27.8% in 2021<sup>79</sup>.

As per the report, 17.6% of the SMEs in Romania reported using trade credit between April 2021 and September 2021, above the EU-27 average of 13.7%. During the same period, 43.7% of SMEs in Romania applied for trade credit, higher than the EU-27 average of 29.6%. 4.9% of Romanian SMEs did not apply due to the possibility of rejection and 22.5% of SMEs did not apply because of sufficient internal funds, lower than the EU-27 average of 37.5%<sup>80</sup>.

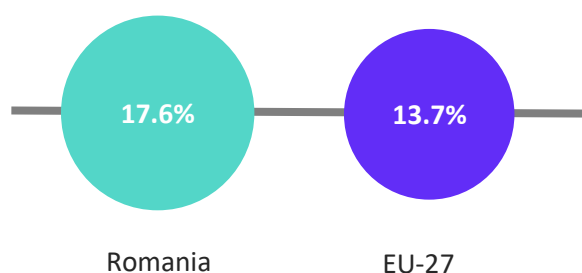
Amongst the firms which applied for trade credit in Romania, 67.4% of SMEs received everything they



applied for, below the EU-27 average of 71.6%. A smaller share of Romanian SMEs (7.5%) received above 75.0% of what they applied for in trade credit, lower than the EU-27 average of 9.6%. 8.0% of SMEs in Romania received below 75.0% of what they applied for, slightly lower than the EU-27 average of 8.7%. Trade credit applications for 6.1% of the Romanian SMEs were rejected<sup>81</sup>.

Regarding the availability of trade credit during April 2021 and September 2021, 22.8% of SMEs reported that the conditions have improved, above the EU-27 average of 14.7%. However, 11.4% of Romanian SMEs also reported that the availability of trade credit had deteriorated, higher than the EU-27 average of 8.2%. For 53.5% of Romanian SMEs, the availability of trade credit remained unchanged during the same period, lower than the EU-27 average of 69.7%<sup>82</sup>.

Share of companies using the trade credit in 2021



**According to the Atradius Payment Practice Barometer 2021 report, there has been a significant drop in the use of trade credit in Romania with 47.0% of all B2B sales transacted on credit compared to 58.0% in 2020<sup>83</sup>.**

The reason cited for offering credit was to stimulate sales growth by encouraging repeat business with existing customers. The reason for declining trade credit cited was the higher risk of payment default. Credit management techniques used include offering discounts for early payment and sending overdue invoice reminders to defaulting customers<sup>84</sup>.

As per the report, 54.0% of the business surveyed in the Romanian construction sector safeguard their accounts receivable through trade credit insurance. These businesses value credit insurance as a cost-effective tool to protect their businesses from bad debt. Alternatively, 60.0% of the uninsured businesses focus on debt collection as a credit management technique. This primarily involves

sending overdue invoice reminders, offering discounts for early payment of invoices and taking steps to avoid concentrations of risk<sup>85</sup>.

In the coming months, 48.0% of the construction businesses in Romania do not plan to change their approach to credit management. However, many of the businesses in the construction sector use credit insurance as a cost-effective tool for managing customer credit risk, with a majority of businesses intending to retain credit risk in-house next year, alongside a preference for cash payments over credit<sup>86</sup>.

## Late payment



**As per the CRIBIS D&B Payment Study 2021, only 13.1% of Romanian companies paid their suppliers on time in 2020, considerably lower than the 20.3% in 2019<sup>87</sup>.**

The report further states that the share of 'bad payers' at the end of 2020 accounted for 8.4% of total companies, taking more than 90 days to repay, while in 2019 it stood at 12.9%. With a share of 30.4% of punctual payers, the retail trade was the best performing sector. With regard to company size, small and medium companies accounted for the highest share of companies making payments over 90 days. Small companies accounted for 10.4% while medium sized companies accounted for 12.5% in 2020. 12.8% of construction firms in Romania tended to pay their dues on time, while 12.9% took more than 90 days to repay in 2020<sup>88</sup>.

**According to the European Payments Report 2021, 49.0% of businesses in Romania have agreed to accept longer payment terms in order to avoid damaging client relationships<sup>89</sup>.**

As per the report, 39.0% Romanian firms consider the widening gap between the payment terms and duration of pay is a real risk to the sustainable growth of their business. On average, business-to-business (B2B) customers in Romania are allowed 40 days to pay dues, lower than the EU-28<sup>90</sup> average of 41 days. However, in practice Romanian B2B customers took an average of 52 days to pay dues in 2021, on par with the EU-28<sup>91</sup> average of 52 days<sup>92</sup>.

34.0% of Romanian companies consider that late payments lead to loss of income and prohibit growth potential, with 42.0% of companies believing that the financial difficulties of debtors are the main cause of the problem<sup>93</sup>.

With the ongoing COVID-19 pandemic, the situation has become more difficult. According to the European Payment Report 2021, 50.0% of respondents expect debtors to have liquidity challenges due to the impact of COVID-19 that will likely affect late payments. This is higher than the EU-28<sup>94</sup> average of 48.0%<sup>95</sup>.

Additionally, 42.0% of respondents in Romania ranked “Risk of a pan-European recession” as one of the main challenges in terms of their customers paying on time and in full over the next 12 months<sup>96</sup>. This is slightly above the EU-28<sup>97</sup> average of 40.0%. At the same time, 61.0% respondents are more concerned than ever before about debtors’ ability to pay on time, below the EU-28 average of 62.0%. Lastly, 67.0% of respondents believe the risk of late/non-payments increasing during the next 12 months, above the EU-28 average<sup>98</sup> of 66.0%<sup>99</sup>.

**According to the Atradius Payments Practices Barometer 2021 report, in Romania 35.0% of the total value of business invoices were overdue in 2021, compared to 47.0% in 2020<sup>100</sup>.**

As per the report, 64.0% of the businesses surveyed are uninsured, relying on internal resources to manage the risk of non-payment. This is an increase on the 59.0% reported in 2020. Also 54.0% anticipate deterioration of B2B customers’ payment practices next year<sup>101</sup>.

Late payments in the Romanian construction sector have more than doubled year-on-year (42.0% in 2021 compared to 18.0% in 2020). 52.0% of the respondents reported no yearly change while only 6.0% reported an improvement in invoice payment timings (down from 13.0% in 2020). Despite an increase in the frequency of late payment, the total value of overdue invoices reduced year-on-year. In 2021, 33.0% of the total value of B2B sales is overdue as compared to 45.0% in 2020<sup>102</sup>.

40.0% of the Romanian construction businesses delayed paying suppliers in order to protect their own cash flow (an increase on the 32.0% in 2020). Several respondents also sought external financing to help mitigate liquidity issues caused by late payments.

**According to the SAFE 2021 report, 21.8% of SMEs in Romania reported facing late payment issues on a regular basis, below the EU-27 average (11.8%)<sup>103</sup>.**

As per the report, 54.0% of SMEs reported that their payments to suppliers have been affected as a result of late payments by customers. For 36.6% of SMEs, late payment affected production or operations, and for 34.3% it impacted investments or new hiring. 21.6% of SMEs also reported that their loan repayments have been delayed, or they have had to seek additional financing, as a result of late payments<sup>104</sup>.

## Time and cost of obtaining building permits and licenses



**As per the 2020 World Bank’s Doing Business Report<sup>105</sup>, Romania ranked 147<sup>th</sup> out of 190 economies in ‘dealing with construction permits’, representing a decline of one position from last year’s ranking (146<sup>th</sup> in 2019)<sup>106</sup>.**

According to the report, it requires 24 procedures and 260 days in total to complete the formalities to build a warehouse<sup>107</sup> in Romania. This is higher than the OECD high-income average (12.7 procedures and 152.3 days) (Table 3). In addition, the cost of obtaining a building permit for a warehouse represents 2.0% of the value of the warehouse, which is again higher than the OECD high-income average of 1.5%. Obtaining a building permit takes 30 days and costs RON 23,644 (EUR 4,965.2). Once obtained, it is valid for 12 months, setting the maximum timeframe for the start of construction. Upon completion of the building, it takes 150 days to obtain the final assessments, including 75 days for water and sewage connection<sup>108</sup>.

Table 3: Construction procedures timing and costs in Romania

Procedure	Time to complete	Associated costs
Obtain topographical documentation	7 days	RON 2,000 (EUR 420)
Obtain approval of topographical documentation and land registry excerpt	15 days	RON 270 (EUR 56.7)
Obtain urban planning certificate ( <i>Certificat de Urbanism</i> )	30 days	RON 14 (EUR 2.9)

## Country Fact Sheet Romania

Procedure	Time to complete	Associated costs
Obtain project clearance from Bucharest Regional Environmental Protection Agency	21 days	RON 500 (EUR 105)
Obtain project clearance from water supply and sewerage authority	18 days	RON 334 (EUR 70.1)
Obtain project clearance from the electric power supply authority	15 days	RON 95 (EUR 20)
Obtain project clearance from General Inspectorate for Emergency Situations	15 days	No charge
Obtain project clearance from Health Department	7 days	RON 250 (EUR 53)
Obtain updated land registry excerpt from the Office for Cadaster and Real Estate Registry	2 days	RON 20 (EUR 4.2)
Sign contract with the solid waste authority	1 day	RON 2,667 (EUR 560)
Notarise statement about nonexistence of land disputes	1 day	RON 15 (EUR 3.2)
Register project with the Order of Architects & pay architecture stamp duty	1 day	RON 1,232 (EUR 258.8)
Obtain building permit <sup>109</sup>	30 days	RON 23,644 (EUR 4,965.2)
Notify the City Hall of the start of construction works	1 day	No charge
Notify the Bucharest Construction Inspectorate of start of construction works & submit schedule of inspections	1 day	RON 11,822 (EUR 2,482.6)
Notify the Bucharest Labour Inspectorate of the start of construction	1 day	No charge
Receive foundations work inspection	1 day	No charge
Receive frame inspection	1 day	No charge
Notify City Hall of completion of works and request final assessment	1 day	No charge
Notify Bucharest Construction Inspectorate of completion of construction & request final assessment	1 day	No charge
Receive final inspection and obtain final assessment from the Acceptance Commission	15 days	No charge
Obtain water and sewage connection	75 days	RON 2,300 (EUR 483)

Procedure	Time to complete	Associated costs
Obtain certification attesting the existence of the construction from the City Hall	30 days	No charge
Register the building with the Real Estate Registry	30 days	RON 1,242 (EUR 260.8)

Source: Doing Business overview for Romania, World Bank, 2020.

## Skills shortage

The number of **job vacancies** in the narrow construction sub-sector decreased by 46.8% between 2010 and 2013, from 1,474 to 784. It picked up since then, reaching 2,449 in 2019. However, it then reduced to 1,726 in 2020, marking a 17.1% increase over 2010 and a 29.5% decline over the previous level. In the case of real estate activities sub-sector, the number of job vacancies significantly grew from 26 in 2010 to 106 in 2019. It then declined to 58 in 2020, marking a 45.5% decline over the previous year and an increase of 122.1% over 2010.

Job vacancies in the narrow construction sub-sector between 2010 and 2020

 **17.1%**

In addition, the number of **tertiary students in engineering, manufacturing and construction** decreased by 38.1% from 37,596 in 2010 to 23,263 in 2019<sup>110</sup>. Specifically, tertiary students in engineering, manufacturing, and architectural activities dropped by 43.5%, 40.8% and 42.4%, respectively, over the 2010-2019<sup>111</sup> period.

Romania is currently facing high labour shortages in the construction sector. This is mainly due to low wages, migration to western European countries and the absence of vocational schools that could form the new generations of construction workers<sup>112</sup>.

**As per industry estimates, to implement the already announced short-to-medium-term construction projects, Romania needs an additional 350,000 workers to supplement the existing ones<sup>113</sup>.**

The Romanian government has taken several measures with regard to workforce shortages. By the end of 2018, the government declared the construction sector a priority economic sector for

the next 10 years and decided to support its development with higher minimum wages and tax breaks<sup>114</sup>.

## Sector and sub-sector specific issues

### Material efficiency and waste management

Owing to the rise in economic activity, specifically in construction, **waste generated by the construction sector** has significantly increased over recent years. Construction and Demolition Waste (CDW) accounts for approximately 25.0% - 30.0% of all waste generated in the EU. CDW mainly consists of several materials, including concrete, bricks, gypsum, wood, glass, metals, plastic, solvents, asbestos and excavated soil, many of which can be recycled<sup>115</sup>.

In 2018<sup>116</sup>, construction activities alone generated a total waste of 647,151 tonnes in Romania. This was 11.9% lower than the waste generated in 2010, 734,946 tonnes<sup>117</sup>.

Waste generated from construction activities in between 2010 and 2018



11.9%

Currently, there is no specific legal framework governing the management of CDW. However, Art.17 of Law nr. 211/2011 defines the obligation to achieve a 70% level of valorisation of the mass of the non-hazardous waste from construction and demolition activities in 2020, in compliance with Waste Framework Directive (Directive 2008/98/EC). It indicates measures such as the effective separation of CDW from other wastes, monitoring of its real composition, processing and separation of CDW materials based on mobility, and reutilisation of resulting fractions in road infrastructure<sup>118</sup>.

Romania adopted a National Waste Management Plan in 2017, with a target of recycling half of its municipal waste by 2020 along with a gradual decline in biodegradable municipal waste (used in landfill) to 35.0%. However, according to the European Commission's 'Early Warning Report', Romania is considered at risk of missing the 2020 municipal waste recycling target of 50%<sup>119</sup>.

Currently, the main practices engaged in the recovery of CDW are backfilling or landscaping, mainly using inert waste that is usually crushed. There are 31 crushing plants at the national level with an estimated total capacity of 3 million tonnes per year. Further, some municipalities in Romania have developed their own construction waste management services through pilot projects in Buzao, Medias and Dej<sup>120</sup>.

### Climate and energy

With a renewable energy share of 24.8% in gross final consumption, Romania has attained its 2020 renewable energy target of 24.0%<sup>121</sup>.

**Emissions** of greenhouse gases (carbon dioxide, methane and nitrous oxides) from the narrow construction and real estate activities sub-sectors in Romania amounted to a total of 2,949,214 tonnes and 482,368 tonnes in 2019<sup>122</sup>, respectively. While emissions in the narrow construction sub-sector increased by 13.2% during the 2010-2019 period, emissions in the real estate activities sub-sector grew slightly by 1.9%<sup>123</sup>.

In the context of the United Nations' Sustainable Development Goals (SDGs), Romania continues its progress towards EU levels. In climate action (SDG13), Romania's performance is below EU-28<sup>124</sup> average levels in greenhouse gas emissions, energy and renewable-energy consumption<sup>125</sup>.

## 5

# Innovation in the construction sector

## Innovation performance

According to the 2021 European Innovation Scoreboard, Romania is classified as an 'Emerging Innovator'<sup>126</sup>.

As per the report, the country's relative strengths lie in sales impacts, digitalisation and environmental sustainability. The country's top three indicators include medium and high-tech goods exports, broadband penetration, and venture capital expenditures. Romania's recent performance has increased with regard to international scientific co-publications, most-cited publications, foreign doctorate students, broadband penetration, and innovative SMEs collaborating with others. It scores relatively low on climate change related indicators<sup>127</sup>.

**Business enterprise R&D expenditure (BERD)** in the narrow construction sub-sector declined by 67.8% between 2010 and 2019<sup>128</sup>, from EUR 2.9 million to EUR 0.9 million. Similarly, BERD in the real estate activities sub-sector experienced a decline of 71.0%, from EUR 0.9 million in 2012<sup>129</sup> to EUR 0.3 million in 2019<sup>130</sup>. Conversely, the professional, scientific and technical activities sub-sector reported the highest BERD expenditure in 2019<sup>131</sup>, amounting to EUR 240.6 million and representing a 3,458.4% increase from the 2010 levels (EUR 6.8 million)<sup>132</sup>.

BERD in the narrow construction sub-sector between 2010 and 2019

↓ 67.8%

In line with BERD expenditure, the total **R&D personnel** (full-time equivalents – FTE<sup>133</sup>) in the professional, scientific and technical activities sub-sector reported the largest number. It increased by 867.0% over 2010-2019<sup>134</sup> period, from 233 to 2,253. Conversely, the number of FTEs in the real estate activities sub-sector stood at 2 in 2019<sup>135</sup>, compared to 20 in 2012<sup>136</sup>, registering a 90.0% decline during the period. Similarly, the

number of R&D personnel in the narrow construction sub-sector fell by 84.0%, from 125 in 2010 to 20 in 2019<sup>137</sup>.

Total R&D personnel in the narrow construction sub-sector between 2010 and 2019

↓ 84.0%

In parallel, the number of **construction-related patent applications** was low, standing between zero and three annually between 2010 and 2020 (one). Furthermore, no Romanian construction-related firms were part of the top 1,000 EU companies by R&D, according to the 2020 EU Industrial R&D Investment Scoreboard<sup>138</sup>.

Under the 'Catching Up Regions Initiative', smart specialisation strategies and governance structures have been set up in two pilot regions (*Nord-Est and Nord-Vest*). This has resulted in the development of regional entrepreneurial discovery processes, including an ambitious projects pipeline to be co-financed through EU funding. The programme is currently being rolled-out to other Romanian regions<sup>139</sup>.

## Eco-innovation and digitalisation

According to the EU Eco-Innovation Index 2021, Romania ranked 23<sup>rd</sup> with a score of 71 on the Eco-Innovation Index, below the EU-27 average score of 121<sup>140</sup>.

As per the report, except in socio-economic outcomes, the country scores below the EU-27 average on four indicators including eco-innovation inputs, eco-innovation activities, eco-innovation outputs, resource efficiency outcomes, and socio-economic outcomes<sup>141</sup>.



**According to the European Commission's Digital Economy and Society Index (DESI) 2021, Romania, with a score of 32.9, ranks 27<sup>th</sup> out of the 27 EU Member States (EU-27 average score: 50.7)<sup>142</sup>.**

As per the report, with a score of 53.2 (EU-27 average: 50.2), Romania performs the best on connectivity dimensions, ranking 10<sup>th</sup>. This is mainly driven by the improved performance in terms of coverage, while stagnating in terms of overall take-up. Also, the country's fast broadband coverage increased to 87%, reaching the EU-27 average<sup>143</sup>.

Moreover, Romania ranks 27<sup>th</sup> in the context of digital public services, 26<sup>th</sup> on human capital, and 25<sup>th</sup> in the EU on integration of digital technology in businesses' activities<sup>144</sup>.

**As per DESI 2021, only 33% of SMEs in Romania have at least a basic level of digital intensity, compared to the EU-27 average of 60%. Also, only 17.0% of enterprises issue e-invoices, considerably below the EU-27 average of 32%<sup>145</sup>.**

At the same time, 31% of Romanian enterprises use Artificial intelligence (AI), much higher than the EU-27 average of 25%. Also, the percentage of enterprises using ICT for sustainability is 68%, slightly above the EU-27 average of 66%<sup>146</sup>.

**Under its EUR 29.1 billion Recovery and Resilience Plan, the Romanian government has allocated 20.5% towards digital related measures<sup>147</sup>.**

The allocated amount will be invested in measures including public services, digital connectivity, cybersecurity, and digital skills, human capital and internet use. These measures tackle important digital issues and priorities in Romania, such as government cloud infrastructure, improving the interoperability of digital public services, investments in e-health or the large-scale deployment of electronic identity cards<sup>148</sup>.

The onset of the COVID-19 pandemic has brought Romania a step closer to digitalisation in construction sector. Now, projects can be more easily moved from planning to development mainly due to the pandemic-driven digitalisation measures for construction, architecture and urbanisation.

**In August 2020, the government of Romania passed an emergency ordinance regulating the use of electronic signatures in relation to construction, architecture and urbanisation, followed in December by a set of technical norms adapted for the application of this ordinance<sup>149</sup>.**

Now, several categories of professionals involved in real estate planning and permitting can now use the electronic signature on the documentation they issue<sup>150</sup>.

The **Research Institute for Construction Equipment and Technologies** (*Institutul de Cercetări pentru Echipamente și Tehnologii în Construcții – ICECON*), takes part in national and European research projects related to materials, innovative construction products and technologies and CDW valorisation. It is also involved in the development of technical regulations, standards and good practices in construction, in line with EU regulations<sup>151</sup>.

As per the FRD Centre (a market research company) analysis of the usage of Building Information Modelling (BIM) in Romania, the interest of local players in the Romanian architectural and construction sector in using BIM is rising<sup>152</sup>.

As per the analysis, currently BIM implementation in Romania is relatively limited. The government is taking initiatives to push for its wider usage in the country. In fact, the Ministry of Regional Development and Public Administration is developing a construction code which includes BIM – it is however unclear what the provisions will be. Moreover, the Ministry of Transportation has started using BIM in the management of projects, but it is not yet a requirement. Overall, BIM remains mostly used in private projects where its use is often a requirement by foreign investors in construction projects. In order to raise awareness, the Society of Construction Law in Romania offers seminars on BIM. Still, more training is required to increase the currently low level of its application in Romania<sup>153</sup>.

Romania's Green Building Council (RoGBC) is also part of the country's construction landscape. It is a non-profit organisation aiming to promote environmental responsibility and energy efficiency<sup>154</sup>.

The council regroups numerous organisations and companies in the construction sector, to promote

and support sustainable development in construction. Moreover, the RoGBC has introduced a certification and training program to provide greater certainty as to the abilities of professionals working in construction and related sectors toward a sustainably built environment<sup>155</sup>.

## 6

# National and regional regulatory framework

## Policy schemes

Romania developed various national initiatives including the First Home Programme, the Rental Housing Units for Young People Programme and the programmes implemented by the National Housing Agency.

In order to facilitate access to housing loans and stimulate the construction sector, the government launched the **First Home Programme** (*Programul Prima Casă*) in June 2009. Under the programme, managed by the National Guarantee Fund for Loans to SMEs, the state issues a guarantee of up to 50.0% of the value of the mortgage offered by adhering banks<sup>156</sup>. As of December 2021, there were 14 banking institutions that granted a First Home loan<sup>157</sup>.

**By the end of 2019, under the First Home Programme, more than 260,000 loans were granted worth a total of RON 24.9 billion (EUR 5.2 billion) for the purchase or construction of housing<sup>158</sup>.**

In February 2020, Romania's loan guarantee fund for small and medium sized enterprises (FNGCMM) announced the First Home Programme's 2020 round. The government also approved around RON 2.0 billion (EUR 419.0 million) for this programme<sup>159</sup>.

Given the high rate of severe housing deprivation, housing affordability issues and the low share of social housing, the Romanian government is actively supporting the construction of new social dwellings, through the **National Housing Agency** (*Agenția Națională pentru Locuințe* - ANL). The two main programmes of the ANL are "Rental Housing Units for Young People" and "Mortgage-financed

**Dwellings**". These were launched in 2001 and are still ongoing<sup>160</sup>.

The **Rental Housing Units for Young People Programme** (*Programul de construcții locuințe pentru tineri, destinate închirierii*) entails the construction of rental dwellings for young people, aged 18 to 35, who cannot afford to buy or rent a property at market price. The units are raised on lots offered by city councils and can be bought by the tenants after minimum one year of lease<sup>161</sup>.

According to the ANL 2019 activity report, the agency delivered 348 homes for rent to young people, out of 2,093 housing units built<sup>162</sup>.

The **Mortgage-financed Dwellings Programme** (*Locuințe prin credit ipotecar*) entails the construction of dwellings that can be purchased through a mortgage, aiming to increase the stock of privately-owned properties. The eligible dwellings are built on lands assigned by local authorities to the ANL<sup>163</sup>. Currently, there are 113 sites under construction, including 99 apartments and 14 houses<sup>164</sup>.

Two other programmes, under the framework of the ANL are also aiming to improve the housing conditions in the country. The first one, **Social Dwellings for Roma Communities** (*Locuințe sociale pentru comunitatile de Rom*) is carried out by the Ministry of Regional Development, Public Administration and European Funds through the National Housing Agency. This is in accordance with the **2015-2020 Strategy of the Romanian Government on the Inclusion of the Romanian Citizens**. It is implemented to improve Roma's people access to decent housing, public services and improve their life quality<sup>165</sup>. By April 2020, under the Social Dwellings for Roma Communities programme, 189 housing units were built and works

at 50 housing units were under various stages of construction<sup>166</sup>.

Another programme, the **development of the infrastructure of the community-based social services** also receives financial support from the state budget and the European budget. The programme, having an implementation period of 2018-2021, has received RON 109.3 million (EUR 23.0 million) from the state budget. It is working towards the transition of 1,000 disabled people from residential institutions to family-type infrastructures (141 sheltered housing)<sup>167</sup>. By December 2019, 143 sheltered houses that accommodate 1,029 disabled adults were made operational in Romania. In addition, 300 residential centres (training for independent living, enabling and rehabilitation, care and assistance) for 16,533 disabled adults and 60 non-residential centres for 1,906 disabled adults were developed<sup>168</sup>.

In addition, under the authority of the Ministry of Regional Development and Public Administration, the National Company for Investment (*Compania Națională de Investiții - CNI*) launched the **National Programme for Public and Social Buildings** in 2001, currently ongoing. This programme finances the construction of public and social buildings, such as cultural institutions, hospitals, schools, sport halls, etc.<sup>169</sup>. However, as social housing policies are being decentralised without a strategic framework, progress in terms of social building is unequal among the Romanian territories<sup>170</sup>.

**Under the Recovery and Resilience Plan, the Romanian government has allocated EUR 2.6 billion for building infrastructures like construction of new social housing and retirement homes, hospitals and healthcare facilities, and pre-school programmes<sup>171</sup>.**

In the context of improving housing conditions, the promotion of a draft normative act for the approval of the National Housing Strategy is expected to be resumed soon. In addition, the new draft Housing Law regulating the economic, technical and legal aspects of building and housing use (in terms of a substantial review of the Housing Law No 114/1996) is also being elaborated by MLPDA (*Ministerul Lucrărilor Publice, Dezvoltării și Administrației*)<sup>172</sup>.

## Building regulations

In Romania, contracts for the design or carrying out of building works are generally regulated by a special set of laws, in addition to the general rules contained in the Romanian Civil Code. The main laws, to be followed regarding construction works/ contracts include<sup>173</sup>:

- Law on Building Permits (50/1991; 125/1996; 453/2001), with its associated Procedural Norms,
- Law on Construction Quality (10/1995)
- Government decision on General Urban Regulation (525/1996),
- Law on urban planning together with various other general and local regulations and plans (350/2001),
- Government decision no. 343/2017 for the amendment of Government Decision no. 273/1994 for the approval of the regulation regarding the reception of construction works and the corresponding installation.

Other important legislation which regulates construction activities at a broader level include the Romanian Constitution and the New Romanian Civil Code (entered into force in October 2011). Laws and regulations for specific building types (residential, hotels, office buildings, schools, hospitals, etc.) are also in place<sup>174</sup>.

**In October 2019, the Romanian President promulgated the Law no. 193/2019 for the amendment and completion of Law 50/1991 on authorising construction works<sup>175</sup>.**

The main amendments to Law 50/1991 include the following:

- Simplification of the approval procedures required for certain categories of works,
- Connection to public utilities networks,
- Reducing the terms of the authorisation procedure,
- The County Prefect will be entitled to annul building/demolition permits, and
- Creation of a sole commission responsible for the issuance of permits.

In 2016, both the Law on Building Permits and the Law on Territorial Planning and Urbanisation were amended by Law 197/2016. Various modifications were introduced to streamline the legislative

framework and ensure compliance with the provisions, including the possibility to issue building permits in 15 days from the submission date in urgent cases, as opposed to the standard 30 days. Moreover, fines for breach of the conditions stated in the construction permit were increased substantially, up to a maximum of RON 100,000 (EUR 22,000) compared to RON 10,000 (EUR 2,200) prior to the amendment<sup>176</sup>.

The Law on Building Permits and Law on Territorial Planning and Urbanisation were further amended in December 2016 by the Government Emergency Ordinance No. 100/2016 ("GEO 100"). These changes include stricter rules to initiate an urban zone plan (*Plan Urbanistic Zonal – PUZ*) for investment projects located within city limits. Overall, the amendments aim to make the planning procedure for construction work tougher, increase transparency and reduce corruption<sup>177</sup>.

## Insurance and liability related regulations

According to the Law on The Quality of Constructions (Law Nr. 10/1995, modified by the Law nr. 177/2015<sup>178</sup>), the construction contractor is liable for the timely execution of the works under the agreed conditions, hidden defects and the quality of the building structure and materials. Hidden defects in the construction are guaranteed by the contractor for ten years, whereas defects affecting the structural core of the construction are guaranteed for the entire life of the building<sup>179</sup>. However, parties can negotiate to limit or extend liability, unless otherwise provided by law. Contractually, parties can pre-determine the value of the loss and agree to cap contractor liability. Contractor's liability can be limited as a result of a negotiation process. There is no unified practice in relation to the establishment of a cap on liability. If agreed, it is usually established as a percentage of the entire value of the contract (usually a minimum

of 10%). Generally, only delay penalties are capped<sup>180</sup>.

In September 2018, Law 10/1995 and its amendment 177/2015 were completed, re-published and adopted by the government of Romania. The completions concern, among others, the technical verification of the quality of the construction work and the technical expertise required, to name a few<sup>181</sup>.

The use of voluntary insurance is expanding in the construction sector. Several types are available, including civil liability towards third parties, civil liability of civil engineers and architects, professional civil liability arising from the design activity and the "All Risks" insurance for construction fitting works and for the constructor's liability. Moreover, after the handover of the construction work, Law no. 260/2008 on the mandatory insurance of homes against earthquakes, landslides and floods stipulates that all natural and legal persons must insure their property<sup>182</sup>.

Even although insurance against catastrophic events is mandatory, in practice few Romanian residential properties are insured. This is mainly due to the lack of financial education in the country, combined with authorities avoiding fining people for non-compliance with the law<sup>183</sup>.

Insurance costs differ as per the level of complexity of the project. For a simple project (e.g., an office building), the value of the policy will be 0.14 – 0.16% of the value of the project. For the rehabilitation of a railway, the cost is 0.4 - 0.5%. If the projects are complex, involving digging and other dangerous activities, (e.g., building an underground line) the value may be between 0.8 and 1%<sup>184</sup>. The insurance cost also differs regarding the type of residential building insured. Houses built with solid materials will be more expensive to insure, with a higher insured value compared to house built with cheaper materials<sup>185</sup>.



# Current status and national strategies to meet Construction 2020 objectives

## TO 1 – Investment conditions and volumes

**Total investment by the broad construction sector<sup>186</sup>**, has been fluctuating since 2010 (Figure 10). Particularly, investment by the narrow construction sub-sector increased by 96.0%, from EUR 2.9 billion in 2010 to EUR 5.8 billion in 2019<sup>187</sup>. Similarly, investment by the real estate activities sub-sector grew by 80.9%, from EUR 5.2 billion in 2010 to EUR 9.4 billion in 2019<sup>188</sup>.

Total investment by the narrow construction sub-sector between 2010 and 2019

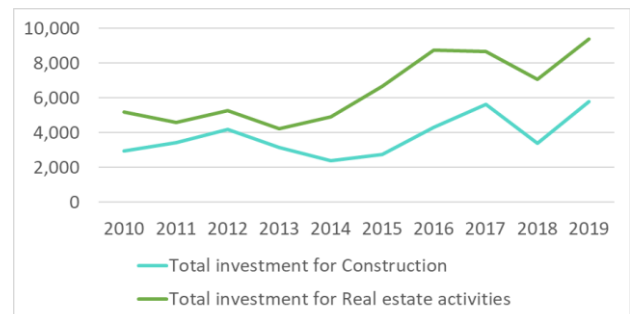
↑ 96.0%

Likewise, **investment in intellectual property products** by the real estate activities sub-sector increased from EUR 4.5 million in 2010 to EUR 4.7 million in 2019<sup>189</sup>, experiencing a growth of 4.4% over the period. However, investment by the narrow construction sub-sector for the same category declined by 40.7%, from EUR 123.6 million in 2010 to EUR 73.3 million in 2019.

Investment in intellectual property products by the narrow construction sub-sector between 2010 and 2019

↓ 40.7%

Figure 8: Investment by the Romanian broad construction sector between 2010 and 2019 (EUR m)



Source: Eurostat, 2021.

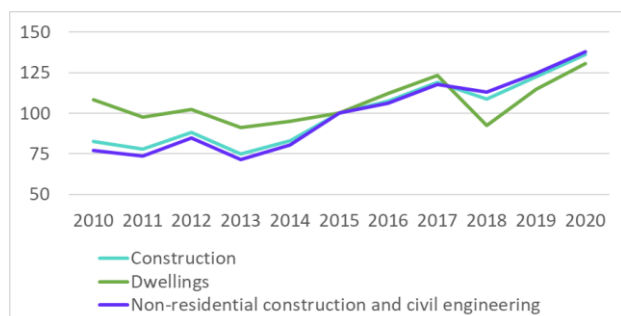
The total **investment index of the broad construction sector<sup>190</sup>** increased by 36.3% between 2015 and 2020 (Figure 11). This growth was mainly driven by investment in dwellings by the whole economy, as well as in non-residential construction and civil engineering, which marked growth of 30.7% and 37.8%, respectively, over the same reference period.

In absolute terms, **investment in the broad construction sector** totalled EUR 28.0 billion in 2019<sup>191</sup>, out of which EUR 5.0 billion were invested in dwellings and EUR 23.0 billion in non-residential construction and civil engineering<sup>192</sup>.

Total investment index in non-residential construction and civil engineering 2010 and 2019

↑ 44.6%

Figure 9: Investment index in the Romanian construction sector between 2010 and 2020 (2015=100)



Source: AMECO, 2021.

Total **inland infrastructure** investment<sup>193</sup> as a share of GDP decreased from 2.7% in 2010 to 1.2% in 2018<sup>194</sup>, marking its lowest level since 2010.

Despite that, **investment in air transport infrastructure** went up substantially by 103.6%, rising from EUR 0.9 million in 2010 to EUR 1.9 million in 2018<sup>195</sup>. This was followed by 8.3% rise in investment in railway infrastructure, which grew from EUR 168.9 million to EUR 182.9 million over the same period. Conversely, investment in inland waterways infrastructure declined from EUR 423.5 million in 2010 to EUR 189.7 million in 2018 (-55.2%). Similarly, investment in road infrastructure dropped to EUR 2.2 billion in 2018 from EUR 2.9 billion in 2010, witnessing a decline of 23.5% during the period.



**Renovation spending as a share of total household disposable income stood at 1.3% in 2019 compared to the 2010 level of 2.7%.**

**Household renovation spending** in Romania increased by 12.9%, rising from EUR 2.3 billion in 2010 to EUR 2.6 billion in 2020.

**In April 2021, the Romanian government announced plans to spend around USD 5.27 billion (EUR 4.6 billion) on various road improvement projects in the country<sup>196</sup>.**

The plan covers work on sections of the A7, A8 and A3 highways. The highway connecting Lugoj and Deva and a section from the A1 highway to the Timisoara Airport will also be improved. The projects will be executed between 2021 and 2025<sup>197</sup>.

**Under its Recovery and Resilience Plan, the Romanian government allocated EUR 3.9 billion towards the modernisation of railway infrastructure<sup>198</sup>.**

This will include electrified or zero-emission railways and rolling stock.

The EU has been supporting infrastructure investments in Romania through EFSI, where total financing amounted to EUR 1.0 billion by December 2020 and is set to trigger EUR 5.0 billion in additional investments in the country. Under the infrastructure and innovation window, 27 projects have been financed by the European Investment Bank (EIB) with EFSI backing. These projects amount to around EUR 823.0 million and are set to trigger EUR 2.7 million in total investments. Additionally, under the SMEs window, 27 agreements have been approved, involving a total financing of EUR 298.0 million, and are set to trigger investments of up to EUR 2.5 billion, benefitting about 48,425 SMEs and mid cap companies from improved access to finance<sup>199</sup>.

**The EU, in March 2021, announced the investment of EUR 726.0 million for the construction of the new 121 km road between the Romanian cities of Craiova and Pitești<sup>200</sup>.**

The project is part of the Trans-European Transport Network and consists of two lanes running in each direction, 10 interchanges, and 75 bridges or passages. The project is expected to be completed by the end of 2023<sup>201</sup>.

Moreover, in July 2020, Romania received EUR 118.0 million for ten key transport infrastructure projects through the EU's grant scheme from the Connecting Europe Facility. The funding comes as part of a EUR 2.2 billion economic recovery initiative for all member states for 140 infrastructure projects. As such, EUR 48.4 million will go towards the upgrading of the city's main railway line linking Bucharest's North station to the Henri Coandă Airport. Besides this, a major chunk of the grant will also go towards financing a feasibility study on the modernisation of different railway lines across the country<sup>202</sup>.

## TO 2 – Skills

Currently, participation in adult learning is very low in Romania which poses obstacles to the

development of the skills needed in the economy. In fact, **participation in adult learning** stood at only 1.0% in Romania, significantly below the EU-27 average of 9.2%. Also, with regard to the proportion of individuals with basic or above-basic overall digital skills, the country is near the bottom of the EU table, standing at 31.0% in 2019 compared to the EU-27 average of 56.0%<sup>203</sup>.

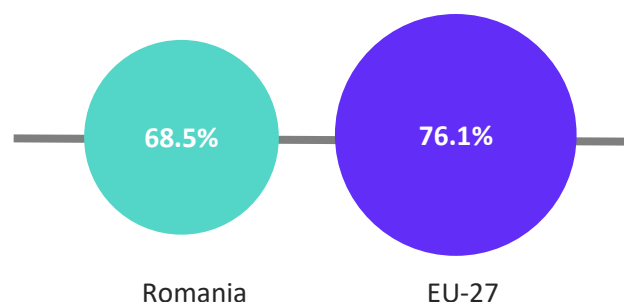
Moreover, the **share of early leavers from education and training** (aged 18-24) stood at 15.6% in 2020. Although the rate has decreased in recent years, it remains significantly higher than the EU-27 average of 9.9% and represents a structural challenge for the school system<sup>204</sup>.

**To reduce the early school leaving, the government has allocated EUR 400.0 million to a grant programme for schools. This will be implemented between 2022 and 2026<sup>205</sup>.**

The scheme will enable the development of various educational support measures and social programmes to prevent and reduce early leaving. More than 2,500 schools will be eligible for funding. In addition, an early warning tool developed and currently being piloted with EU support will be rolled out across the country<sup>206</sup>.

The COVID-19 pandemic has posed challenges for the practical side of learning in vocational education and training (VET). The shift to remote learning and the temporary closure of some businesses particularly affected the dual element of some VET programmes, making the delivery of work-based learning impossible in many cases. This is also reflected in the **employment rate of VET graduates** in Romania which stood at 68.5% in 2020, below the EU-27 average of 76.1%<sup>207</sup>.

Employment rate of VET graduates in 2020



Initial dual VET is a form of the three-year VET programme (*învăţământ profesional*). It is generally

conducted at the request of employers who provide practical training<sup>208</sup>.

**In September 2020, the National Centre for Technical VET Development (CNDIPT) published methodological benchmarks for strengthening teaching and learning in initial VET, as well as a support guide for VET teachers<sup>209</sup>.**

Furthermore, as part of the Recovery and Resilience Plan, the Romanian government has planned to finance the development of 10 regional consortia between territorial VET actors (local authorities, schools, universities, chambers of commerce and businesses) in order to deliver effective training in dual VET<sup>210</sup>.

**The Casa de Meserii a Constructorilor - CMC (The Builder Vocational Training School) is responsible for the development of the human capital base in the construction sector and the promotion of continuous professional training<sup>211</sup>.**

To this end, CMC offers a variety of courses, including stonemasonry, plastering, waterproof insulation, roofing and flooring, as well as project management and 'training of trainers'. It promotes collaboration between a variety of stakeholders, from national trade associations to relevant employer associations actively involved in defining the needs and actions to be taken for the development of the construction human capital. CMC also participates in national and international projects to support adult education and training, develop energy efficiency-related skills and expand the skilled workforce in the sector<sup>212</sup>.

### TO 3 – Resource efficiency / Sustainable construction

Energy efficiency and sustainable construction in Romania are governed by the national **Law no. 121/2014 on energy efficiency**, which corresponds to the transposition of the EU Directive 2012/27/EU on energy efficiency. This law provides an overview of the main actions to be taken in order to achieve the 2020 energy saving targets, as well as defining a legislative framework on the development and implementation of energy efficiency<sup>213</sup>.

In 2020, the government approved amendments to **Law no. 372/2005** which relate to the energy performance of buildings (Law No. 101/2020). **Law**

**No. 101/2020** transposes Directive (EU) 2018/844 of the European Parliament and of the Council of 30 May 2018 amending Directive 2010/31/EU on the energy performance of buildings and Directive 2012/27/EU on energy efficiency<sup>214</sup>.

Law No. 101/2020 explains the responsibility of the Ministry of Public Works, Development and Administration to issue a long-term strategy focused on the renovation of the national complex of public and private residential and non-residential buildings, and the transformation thereof into a real estate complex with high energy efficiency<sup>215</sup>.

This will facilitate the transformation of the existing buildings into “nearly zero-energy buildings”. The new law increases the weight of the renewable energy resources from 10.0% to 30.0% of the required energy<sup>216</sup>.

**In October 2021, the Romanian government approved the Integrated National Energy and Climate Plan (NECP), for the 2021-2030 period<sup>217</sup>.**

As per the plan, the share of energy from renewable sources in total energy consumption must, by 2030, include net installed capacities of 5.1GW of solar and 5.3GW of wind. In total, Romania’s target is to install additional capacities of 6.9GW from renewable sources in the period 2021-2030. The plan aims to address the five main aspects of energy policy in line with European Union priorities including energy security, decarbonisation, energy efficiency, the internal energy market, and research, innovation and competitiveness<sup>218</sup>.

**The Thermal Rehabilitation Programme** (*Programul de Reabilitarea termica a blocurilor de locuinte*)<sup>219</sup>, launched in 2009 by the Ministry of Regional Development is still ongoing. It aims to increase the energy efficiency of residential buildings built between 1950 and 1990 to reduce the specific annual consumption of energy for heating below 100kWh/m<sup>2</sup>. Under the programme, 80% of the rehabilitation works costs are covered by state and local budgets, with homeowners (beneficiaries) providing the remaining amount<sup>220</sup>.

**Under the Recovery and Resilience Plan (RRP), the Romanian government has planned to invest EUR 2.7 billion for the energy-efficient renovation and seismic renovation of multi-family buildings and public buildings<sup>221</sup>.**

The plan does not include any details regarding deep renovations or the application of the Energy Efficiency First Principle, but for initiatives under the Fund for the Renovation Wave pillar the aim is to reduce primary energy savings by at least 30%. The estimation is to deliver a total CO<sub>2</sub> savings of at least 0.13 million tonnes and total primary energy savings of at least 0.03 Mtep (Mean Territorial Energy Based Clustering Protocol) in the residential sector, and least 0.07 million tons and total primary energy savings of at least 0.02 Mtep in the public sector<sup>222</sup>.

**In September 2020, the Romanian government launched the "Energy-Efficient House" financing program. The objective is to reduce the energy consumption of Romanian households and thus, to minimise the level of greenhouse gas emissions in these areas<sup>223</sup>.**

The aims of this program are to increase the energy performance of unmodernised houses and to create sustainable growth in the use of RES in existing single-family homes, situated in a building consisting of a maximum of 3 levels. The eligible costs under this program include installation of new windows with a low heat transfer coefficient, insulating materials for exterior walls, purchase, assembly and commissioning of a more efficient central heating system, solar panels, improved ventilation systems, lighting fixtures with LEDs, motion sensors, new valves and pipes, etc<sup>224</sup>.

Furthermore, as per the requirements of the program, each applicant will have to make an initial energy audit of the house he wants to improve and must submit an online application for financing, reaching a maximum of EUR 14,400. The maximum duration for each project is 18 months. Upon completion, the Environmental Fund Administration will provide 60% of the value of the improvements, after a new specialized audit of the house<sup>225</sup>.

## TO 4 – Single Market

According to the EU Single Market Scoreboard 2021, Romania performs well with respect to internal market information systems and trade integration in the single market for goods<sup>226</sup>.

With a transposition deficit of 1.1%, Romania has not met its proposed target of 0.5% (EU-27 average stood at 1.0%). The average delay now stands at 7.2 months, which is below the EU-27 average of 7.4 months. Romania has 11 overdue directives, translating in a stable conformity deficit of 1.3%, compared to the EU-27 average of 1.4%. In terms of infringements, the country reported 37 single market-related pending cases compared to EU-21 average of 31 cases. The average case duration increased to 26.5 months (below the EU-27 average 37.3 months) from 19.0 months previously reported<sup>227</sup>.

Romania maintained its strong performance in terms of internal market information systems, with all five indicators standing above the EEA average. Also, Romania had the third best result for requests accepted within one week. Similarly, its trade integration in the single market for goods and services stood above the EU-27 average. In 2019, the country's trade integration for goods decreased by 5.1 pps to 24.4% of GDP, while trade integration for services increased markedly by 7.3 pps to 8.4% of GDP. Nonetheless, the country's performance with regards to public procurement was unsatisfactory<sup>228</sup>.

Romania is categorised as a country with high corruption risk when it comes to public procurement, as per the GAN Corruption Report for Romania<sup>229</sup>.

According to the report, the country's public procurement system is vulnerable to irregularities with companies perceiving bribes and irregular payments to be widely accepted in return for obtaining public contracts and licences. Almost half of business respondents believe that corruption has prevented them from winning a public tender. Inter alia, unclear evaluation criteria, collusive bidding, tailor-made specifications for companies were other risk factors commonly identified by companies in Romania<sup>230</sup>.

To further combat corruption and ensure integrity in the public sector, the government, through an

emergency ordinance 13/2017, approved amendments to the Penal Code in January 2017, seeking to decriminalise government corruption and abuse of power. Although the amendments were withdrawn through emergency ordinance 14/2017 following significant protests from the population, such developments may compromise efforts in the fight against corruption<sup>231</sup>.

The level of restrictiveness, in terms of administrative procedures for setting up businesses as well as regulatory requirements, is higher in Romania compared to the single market average for civil engineers and architects<sup>232</sup>.

The Institute for Research of Equipment and Technologies in Construction (*Institutul de Cercetări pentru Echipamente și Tehnologii în Construcții - ICECON*) plays an important role in the integration of the Romanian construction market with the EU and the standardisation of construction products. The institute evaluates and verifies performance in the field of construction products (in conformity with EU Regulation no 305/2011)<sup>233</sup>. Furthermore, the Ministry of Regional Development, Public Administration and European Funds, acts as the **Product Contact Point for Construction**. It provides information on the requirements applicable to construction products covered by harmonised standards or European technical assessments<sup>234</sup>.

Regarding the implementation of **Eurocodes**, all Eurocode Parts are published as National Standards and translated in the national language, with 11 Eurocode Parts made obligatory for structural design. If an issue is not covered by the Romanian codes, one may use a state-of-the-art standard, including the Eurocodes. Also, National Annexes published to all Eurocodes Parts are available in English. However, there is no regulatory framework enforcing the use of the Eurocodes in public procurement<sup>235</sup>.

## TO 5 – International competitiveness

As per World Bank Doing Business 2020 report, Romania ranked 1<sup>st</sup> out of 190 economies in the ease of trading across border, achieving a score of 100<sup>236</sup>.



As per the report, in Romania, it takes only one hour to be documentary compliant and almost no time to be border compliant. In terms of costs, businesses do not need to spend any amount to be documentary and border compliant<sup>237</sup>.

The **internationalisation of construction products** in the Romanian construction sector has been consistently showing signs of growth since 2010. **The export values of all construction-related products** increased from EUR 761.2 million in 2010 to EUR 1.2 billion in 2020, marking an increase of 59.7% over the period. Moreover, Romania's share of exports of all construction-related products stood at 30.4% of the total value of production in 2019, higher than the 2010 level of 28.0% and the EU-27 average of 11.3%. This increased to 32.7% in 2020.

Export value of all  
construction-related  
products between 2010  
and 2020

↑ 59.7%

However, the export value of architectural services declined to EUR 72.9 thousand in 2020 compared to EUR 500.0 thousand in 2010, representing a substantial decline of 85.4% between 2010 and 2020.

Export value of all  
architectural services  
between 2010 and 2020

↓ 85.4%

In the context of **inward FATS (foreign affiliates statistics)**<sup>238</sup>, while the value added at factor cost in the manufacturing sub-sector increased by 80.6%, it experienced declines of 100.0% and 28.6% in the real estate activities and narrow construction sub-sectors respectively between 2010 and 2018<sup>239</sup>. Similarly, turnover in the manufacturing and real estate activities sub-sectors grew by 82.1% and 52.2% respectively, whereas it declined by 12.1% in the narrow construction sub-sector over the 2010-2018 period.

In terms of **outward FATS**<sup>240</sup>, turnover in the narrow construction and the manufacturing sub-sectors

grew by 700.0% and 82.1%, respectively, between 2010 and 2018<sup>241</sup>. The number of people employed in the manufacturing sub-sector increased remarkably by 984.9%, while it declined by 84.6% in the narrow construction sub-sector during the same reference period.

During 2018, two new measures were implemented by the Ministry of Business Environment, Commerce and Entrepreneurship for promoting internationalisation.

- Firstly, the **'Integrated export services for SMEs in Romania programme'** (*Programul 'Servicii integrate de export pentru IMM din România'*), aimed at helping Romanian companies become more internationally competitive by setting up two new business centres for exporters and also providing financial support to help them enter into new international markets, with up to EUR 43,000 available per project.
- Secondly, the **'Supporting the internationalisation of Romanian economic operators'** (*Programul de susținere a internaționalizării firmelor românești*) initiative is aimed at developing new instruments to support Romanian SMEs in new markets. The measure finances various activities to help SMEs in the internationalisation process, including participation in trade fairs and exhibitions (up to EUR 7,500).

The Ministry for Business Environment, Commerce and Entrepreneurship provides support for the internationalisation of Romanian companies through its **Export Promotion Tools and Programs Directorate** (*Programul de promovare a exportului*). Its objectives include the increase of the number of Romanian companies exporting, the promotion of quality Romanian goods and services abroad, the diversification of export markets and the improvement of the methods used to identify new international opportunities<sup>242</sup>.

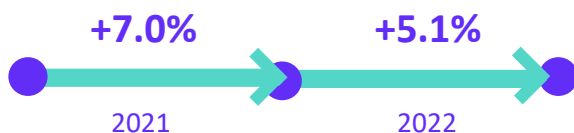
## 8

# Outlook

In 2020, Romania's GDP experienced an annual contraction of 3.9% in comparison with 4.2% of growth in 2019. However, the Romanian economy is projected to revive and register fast growth in 2021 and afterwards.

Romania's GDP is projected to rise by 7.0% in 2021, amounting to RON 894.9 billion (EUR 179.0 billion) and then by 5.1% in 2022, reaching RON 940.3 billion (EUR 188.1 billion)

Expected GDP growth in 2021 and 2022



Similarly, the **volume index of production** in the broad construction sector is expected to increase by 10.8 ip (index points) YoY in 2021, mainly driven by 16.4 ip and 8.5 ip increases in the construction of buildings and the construction of civil engineering in 2021, respectively.

**Turnover** in the broad construction sector is forecast to grow by 5.0% in 2021, reaching EUR 39.4 billion. This growth is primarily expected to come from all the sub-sectors including the real estate activities (+10.2%), architectural and engineering activities (+7.1%), manufacturing (+5.1%), and the narrow construction (+3.8%).

Similarly, the **total value added** of the broad construction sector is forecast to accelerate by 5.5% in 2021, reaching EUR 14.2 billion.

The **housing market** is one of the primary drivers of the Romanian construction sector, supported by a combination of lower mortgage rates, favourable governmental housing schemes and increased household disposable income. Moreover, initiatives such as the First Home Programme,

Mortgage-financed Dwellings Programme and Social Dwellings for Roma Communities are expected to drive the growth in the Romanian housing market.

Under the Recovery and Resilience Plan (RRP), the Romanian government has allocated EUR 2.6 billion for building infrastructures such as the construction of new social housing and retirement homes, hospitals and healthcare facilities, and pre-school programmes and EUR 3.9 billion towards the modernisation of railway infrastructure.

Also, the government has planned to invest EUR 2.7 billion for the energy efficient renovation and seismic renovation of multi-family buildings and public buildings.

The **civil engineering segment** will further boost construction sector growth, driven by important planned investments in public infrastructure, transport and substantial contributions from EU backed funds. For instance, in March 2021, the EU announced the investment of EUR 726.0 million for the construction of the new 121 km road between the cities of Craiova and Pitești, in Romania.

In April 2021, the Romanian government announced plans to spend around USD 5.27 billion (EUR 4.6 billion) on various road improvement projects in the country<sup>243</sup>.

The plan covers work on sections of the A7, A8 and A3 highways. The projects will be executed between 2021 and 2025.

Overall, the economic outlook for the Romanian broad construction sector remains positive. Major improvements in the investment environment driven by EU financing, large scale digitalisation, infrastructure projects, and energy efficiency measures will further act as a positive development for the sector.

# References

- 1 Please note that this 2020 data is a nowcast - please refer to the methodology notes for further details.
- 2 Romania's construction sector keeps growing on repair and maintenance, October 2020.  
<https://www.romania-insider.com/construction-sector-growth-august-2020>
- 3 SeeNews, Romania's construction output fall 1.3% y-o-y in Jan-Oct, December 2021  
<https://seenews.com/news/romania-construction-output-falls-13-yy-in-jan-oct-table-765806>
- 4 Please note that the share of each sub-sector in the value added of the broad construction sector should not be compared to the shares of the Gross Value Added in the GDP, since the GDP also includes taxes and excludes subsidies.
- 5 Please note that this 2020 data is a nowcast - please refer to the methodology notes for further details. No data available for the real estate activities sub-sector.
- 6 Please note that the share of each sub-sector in the value added of the broad construction sector should not be compared to the shares of the Gross Value Added in the GDP, since the GDP also includes taxes and excludes subsidies.
- 7 Data unavailable for subsequent years.
- 8 Data for manufacturing and architectural and engineering activities not available.
- 9 Data unavailable for subsequent years.
- 10 Data unavailable for subsequent years.
- 11 Apparent labour productivity refers to the Gross Value Added per person employed.
- 12 Data unavailable for subsequent years.
- 13 Please note that this 2020 data is a nowcast - please refer to the methodology notes for further details.
- 14 Data unavailable for real estate activities for 2019.
- 15 Please note that this 2020 data is a nowcast - please refer to the methodology notes for further details.
- 16 Please note that this 2020 data is a nowcast - please refer to the methodology notes for further details.
- 17 Data for subsequent years unavailable.
- 18 The gross operating rate is the ratio of Gross Operating Surplus to Turnover and is an indicator of profitability.
- 19 Data unavailable for subsequent years.
- 20 Data unavailable for real estate activities for 2019.
- 21 Data unavailable for subsequent years.
- 22 Data unavailable for subsequent years.
- 23 Data on employment by occupation is not available for the architectural and engineering activities sub-sector.
- 24 Data unavailable for other sub-sectors.
- 25 Data unavailable for other sub-sectors.
- 26 World Bank Group, Doing Business 2020, Economy Profile for Romania.  
<https://www.doingbusiness.org/content/dam/doingBusiness/country/r/romania/ROM.pdf>
- 27 As the publication of the WB Doing Business report 2021 was not available at the time of the writing, this report relies on the data provided by the 2020 edition
- 28 World Bank Group, Doing Business 2020, Economy Profile for Romania.  
<https://www.doingbusiness.org/content/dam/doingBusiness/country/r/romania/ROM.pdf>
- 29 Global Entrepreneurship Monitor, Entrepreneurial Behaviour and Attitudes, 2020  
<https://www.gemconsortium.org/data/key-aps#>
- 30 Data available till 2015.
- 31 2019 SBA Fact Sheet, Romania. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 32 As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.
- 33 2019 SBA Fact Sheet, Romania. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 34 European Commission, 2021 SME Country Fact Sheet's Background document- Romania.  
[https://ec.europa.eu/growth/smes/sme-strategy/sme-performance-review\\_en](https://ec.europa.eu/growth/smes/sme-strategy/sme-performance-review_en)
- 35 Ibidem.
- 36 Ibidem.
- 37 World Bank Group, Doing Business 2020, Economy Profile for Romania.  
<https://www.doingbusiness.org/content/dam/doingBusiness/country/r/romania/ROM.pdf>
- 38 Ibidem.
- 39 Ibidem.
- 40 Data unavailable for 2020.
- 41 Data unavailable for 2020.
- 42 According to Eurostat, construction services comprises Construction Abroad (code 250) and Construction in the Compiling Economy (code 251). They do not include architectural services, or engineering services.
- 43 No data available prior to 2013.
- 44 No data available prior to 2013.

European Commission, Data, and surveys- SAFE, Results 2021, Results by country  
[https://ec.europa.eu/growth/access-finance-smes/data-and-surveys-safe\\_en](https://ec.europa.eu/growth/access-finance-smes/data-and-surveys-safe_en)

Ibidem.

Ibidem.

EIBIS 2021 - Romania overview 2021. [https://www.eib.org/attachments/publications/eibis\\_2021\\_romania\\_en.pdf](https://www.eib.org/attachments/publications/eibis_2021_romania_en.pdf)  
 As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.

EIBIS 2021 - Romania overview 2021. [https://www.eib.org/attachments/publications/eibis\\_2021\\_romania\\_en.pdf](https://www.eib.org/attachments/publications/eibis_2021_romania_en.pdf)

European Commission, National Reform Programme of Romania 2020.  
[https://ec.europa.eu/info/sites/default/files/2020-european-semester-national-reform-programme-romania\\_en\\_0.pdf](https://ec.europa.eu/info/sites/default/files/2020-european-semester-national-reform-programme-romania_en_0.pdf)

European Commission, State aid: Commission approves €3.3 billion Romanian scheme to support SMEs in coronavirus outbreak.  
[https://ec.europa.eu/commission/presscorner/detail/en/ip\\_20\\_649](https://ec.europa.eu/commission/presscorner/detail/en/ip_20_649)

BSTDB, BSTDB and Garanti BBVA increase support for businesses in Romania, December 2021  
[https://www.bstdb.org/news-and-media/press-releases/press-releases\\_5878](https://www.bstdb.org/news-and-media/press-releases/press-releases_5878)

Data unavailable for 2020.

European Commission, Country Report Romania 2020, February 2020.  
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0522&from=EN>

Ibidem.

Global Property Guide, Romania's housing market losing steam, March 2021  
<https://www.globalpropertyguide.com/news-romania-housing-market-losing-steam-4228>

See News, Romania's Jan-Sept residential building permits jumps 27.8% y/y- table, October 2021  
<https://seenews.com/news/romania-jan-sep-residential-building-permits-jump-278-y-y-table-759105>

The overcrowding rate is defined as the percentage of the population living in an overcrowded household

Eurostat, Overcrowding rate. [http://ec.europa.eu/eurostat/product?code=ilc\\_lvho05a&language=en&mode=view](http://ec.europa.eu/eurostat/product?code=ilc_lvho05a&language=en&mode=view)

Eurostat, Severe housing deprivation rate is defined as the percentage of population living in the dwelling, which is considered as overcrowded, while also exhibiting at least one of the housing deprivation measures. Housing deprivation is a measure of poor amenities and is calculated by referring to those households with a leaking roof, no bath/shower and no indoor toilet, or a dwelling considered too dark.

Eurostat, Severe housing deprivation rate by age, sex and poverty status - EU-SILC survey.  
[http://ec.europa.eu/eurostat/product?code=ilc\\_mdho06a&language=en&mode=view](http://ec.europa.eu/eurostat/product?code=ilc_mdho06a&language=en&mode=view)

The housing cost overburden rate is the percentage of the population living in households where the total housing costs represent more than 40% of disposable income

Eurostat, Housing cost overburden rate by age, sex and poverty status - EU-SILC survey.  
[http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc\\_lvho07a&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_lvho07a&lang=en)

World Economic Forum, The Global Competitiveness Report 2019.  
[http://www3.weforum.org/docs/WEF\\_TheGlobalCompetitivenessReport2019.pdf](http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf)

Ibidem.

Data unavailable for 2020.

As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.

European Commission, Country Report Romania 2020. February 2020.  
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0522&from=EN>

Ibidem.

Romania-Insider.com, RO Transport ministry publishes EUR 73.0 billion, 10-year investment strategy, December 2021  
<https://www.romania-insider.com/transport-ministry-investment-strategy-ro-dec-2021>

European Commission, EU Cohesion policy: EU invests in new road infrastructure in Romania, March 2021  
[https://ec.europa.eu/regional\\_policy/en/newsroom/news/2021/03/24-03-2021-eu-cohesion-policy-eu-invests-in-new-road-infrastructure-in-romania](https://ec.europa.eu/regional_policy/en/newsroom/news/2021/03/24-03-2021-eu-cohesion-policy-eu-invests-in-new-road-infrastructure-in-romania)

European Commission, Recovery and Resilience Plan of Romania, Factsheet. [https://ec.europa.eu/info/sites/default/files/factsheet-romania\\_en.pdf](https://ec.europa.eu/info/sites/default/files/factsheet-romania_en.pdf)

European Commission, Commission Staff Working Document: Analysis of the recovery and resilience plan of Romania,  
[https://ec.europa.eu/info/files/commission-staff-working-document-analysis-recovery-and-resilience-plan-romania\\_en](https://ec.europa.eu/info/files/commission-staff-working-document-analysis-recovery-and-resilience-plan-romania_en)

Data unavailable for subsequent years.

Data unavailable for subsequent years.

Romanian bankruptcy increased by 23% in the first semester of 2021 compared to the same period last year – Romanian Journal, August 2021. <https://worldakkam.com/romanian-bankruptcy-increased-by-23-in-the-first-semester-of-2021-compared-to-the-same-period-last-year-romanian-journal/233218/>

Ibidem.

European Commission, Data and surveys- SAFE, Results 2021, Results by country  
[https://ec.europa.eu/growth/access-finance-smes/data-and-surveys-safe\\_en](https://ec.europa.eu/growth/access-finance-smes/data-and-surveys-safe_en)

Ibidem.

Ibidem.

Ibidem.

Atradius Payment Practices Barometer, Romania: cash dominates as businesses shun trade credit, December 2021

<https://group.atradius.com/publications/payment-practices-barometer/romania-2021-cash-dominates-as-businesses-shun-trade-credit.html>

Ibidem.

Ibidem.

Ibidem.

FEBIS, CRIBIS D&B Payment Study 2021. <https://www.febis.org/2021/06/17/payment-study-2021/>

Ibidem.

Intrum, European Payment Report 2021.

<https://www.intrum.com/publications/european-payment-report/european-payment-report-2021/>

As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.

Ibidem.

Intrum, European Payment Report 2021.

<https://www.intrum.com/publications/european-payment-report/european-payment-report-2021/>

Ibidem.

As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.

Intrum, European Payment Report 2021.

<https://www.intrum.com/publications/european-payment-report/european-payment-report-2021/>

Intrum: European Payment Report 2021, <https://www.intrum.com/publications/european-payment-report/european-payment-report-2021/>

As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.

Ibidem.

Intrum: European Payment Report 2021, <https://www.intrum.com/publications/european-payment-report/european-payment-report-2021/>

Atradius Payment Practices Barometer, Romania: cash dominates as businesses shun trade credit, December 2021

<https://group.atradius.com/publications/payment-practices-barometer/romania-2021-cash-dominates-as-businesses-shun-trade-credit.html>

Ibidem.

Ibidem.

European Commission, Survey on the access to finance for SMEs, Results by country 2021.

[https://ec.europa.eu/growth/access-finance-smes/data-and-surveys-safe\\_en](https://ec.europa.eu/growth/access-finance-smes/data-and-surveys-safe_en)

Ibidem.

World Bank Doing Business 2020 Report, Economic Profile Romania, 2020.

<https://www.doingbusiness.org/content/dam/doingBusiness/country/r/romania/ROM.pdf>

World Bank Group, Doing Business 2020, Economy Profile for Romania.

<https://www.doingbusiness.org/content/dam/doingBusiness/country/r/romania/ROM.pdf>

The warehouse in this example is defined as a structure for general storage activities, with two stories, above ground and with total constructed area of approx. 1,300 square meters. The ground, on which the warehouse is built is owned by the company that will use it and valued at 50 times income per capita. There are architectural and technical plans prepared for the warehouse, which are also taken into account and counted as procedures if their preparation requires obtaining further documentation or getting prior approvals from external agencies. Finally, in this example the warehouse takes 30 weeks to construct, excl. all delays due to administrative and regulatory requirements.

Ibidem.

Obtain a building permit refers to a sub-process of the building permit system, that needs to be completed in order to obtain the actual building permit. This information is provided to allow comparability between the countries. For more precise information, the reader is invited to consult the methodology (hyperlink of WB methodology) and the conditions of the concrete case.

Data unavailable for subsequent years.

Data unavailable for subsequent years.

European Commission, Country Report Romania 2020. February 2020.

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0522&from=EN>

Shortage of construction workers in Romania, February 2021. <https://transylvanianow.com/lots-of-construction-projects-but-not-enough-workers/>

Schoenherr, Romania's construction sector: New rules aimed at hindering workforce shortages, <https://www.schoenherr.eu/publications/publication-detail/romania-construction-sector-new-rules-aimed-at-hindering-workforce-shortages/>

European Commission- Construction and Demolition Waste (CDW), December 2019.

[https://ec.europa.eu/environment/waste/construction\\_demolition.htm](https://ec.europa.eu/environment/waste/construction_demolition.htm)

Data unavailable for subsequent years.

Eurostat. Generation of waste by economic activity. [https://ec.europa.eu/eurostat/tgm/refreshTableAction.do?sessionId=s6y4t-FNe\\_uGP1oZ4kgizWKUizvhiHvo\\_VKfAYoldl-olTh0b0jm!-1619364693?tab=table&plugin=1&pcode=ten00106&language=en](https://ec.europa.eu/eurostat/tgm/refreshTableAction.do?sessionId=s6y4t-FNe_uGP1oZ4kgizWKUizvhiHvo_VKfAYoldl-olTh0b0jm!-1619364693?tab=table&plugin=1&pcode=ten00106&language=en)

Ministerul Mediului si Schimbarilor Climatice, Strategia Nationala de Gestionare a Deseurilor 2014-2020. November 2013.

<http://www.mmediu.ro/beta/wp-content/uploads/2013/04/2013-04-23-DGDSP-SNGD.pdf>

Environment Implementation Review 2019 – Romania

[https://ec.europa.eu/environment/eir/pdf/report\\_ro\\_en.pdf](https://ec.europa.eu/environment/eir/pdf/report_ro_en.pdf)

Construction and Demolition Waste in Romania: The Route from Illegal Dumping to Building Materials.



[https://www.researchgate.net/publication/333824729\\_Construction\\_and\\_Demolition\\_Waste\\_in\\_Romania\\_The\\_Route\\_from\\_Illegal\\_Dumping\\_to\\_Building\\_Materials](https://www.researchgate.net/publication/333824729_Construction_and_Demolition_Waste_in_Romania_The_Route_from_Illegal_Dumping_to_Building_Materials)

European Commission, Country Report Romania 2020. February 2020.

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0522&from=EN>

Data for subsequent years not available.

Eurostat, Air emissions accounts by NACE Rev. 2 activity

<https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>

As the EU-27 average data was not available, the EU-28 average was used for comparative purposes.

European Commission, Country Report Romania 2020. February 2020.

<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0522&from=EN>

European Commission, European Innovation Scoreboard 2021 - Romania. <https://ec.europa.eu/docsroom/documents/45932>

Ibidem.

Data unavailable for subsequent years.

Data unavailable for 2010 and 2011.

Data unavailable for subsequent years.

Data unavailable for subsequent years.

Data unavailable for 2019.

A full-time equivalent (FTE) is a unit to measure employed persons in a way that makes them comparable, although they may work a different number of hours per week. The unit is obtained by comparing an employee's average number of hours worked to the average number of hours of a full-time worker. A full-time person is therefore counted as one FTE, while a part-time worker gets a score in proportion to the hours worked.

Data unavailable for subsequent years.

Data unavailable for subsequent years.

Data unavailable for 2010 and 2011.

Data unavailable for subsequent years.

The 2021 EU Industrial R&D Investment Scoreboard,

[https://iri.jrc.ec.europa.eu/sites/default/files/contenttype/scoreboard/2022-01/SB2021\\_EU1000.xlsx](https://iri.jrc.ec.europa.eu/sites/default/files/contenttype/scoreboard/2022-01/SB2021_EU1000.xlsx)

European Commission. European Semester Country Report 2019 – Romania.

[https://ec.europa.eu/info/sites/info/files/file\\_import/2019-european-semester-country-report-romania\\_en.pdf](https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-romania_en.pdf)

European Commission, Eco-innovation in Romania, EIO Country Profile, 2021.

[https://ec.europa.eu/environment/ecoap/indicators/index\\_en](https://ec.europa.eu/environment/ecoap/indicators/index_en)

Ibidem.

European Commission, Digital Economy and Society Index (DESI) 2021 – Romania.

<https://ec.europa.eu/newsroom/dae/redirection/document/80496>

Ibidem.

Ibidem.

Ibidem.

Ibidem.

Ibidem.

Ibidem.

Ibidem.

Romania's construction sector moves a step nearer digitalization, March 2021. <https://www.schoenherr.eu/content/romania-s-construction-sector-moves-a-step-nearer-digitalisation/>

Ibidem.

ICECON, Programe Europene. <http://www.icecon.ro/#>

Building Information Modelling (BIM) in Romania - potential for market entry of new suppliers of BIM, June 2018.

<http://market-entry-romania.blogspot.com/2018/06/building-information-modelling-bim-in.html>

Annual Conference of the European Society of Construction Law, Perspectives of BIM implementation in Romania, Dr Ovidiu Ioan Dumitru.

2017. [http://www.unifr.ch/ius/assets/files/Institus/IST\\_Baurecht/files/ESCL\\_OvidiuIoanDumitru.pdf](http://www.unifr.ch/ius/assets/files/Institus/IST_Baurecht/files/ESCL_OvidiuIoanDumitru.pdf)

Romania Green Council. <http://rogbc.org/en/about/about-us>

Romania Green Council. <http://www.rogbc.org/en/education/rogbc-certification-training-program>

Conso.ro, Ce este Prima Casa? <http://www.conso.ro/ghid/programul-prima-casa/ce-este-programul-prima-casa>

First House 2021 - find out everything you need to know

Romania-Insider, Govt.-backed home purchase program kicks off in Romania, February 2020. <https://www.romania-insider.com/first-house-program-start-2020>

Ibidem.

Economica, The government cuts half the ANL subsidies for housing construction. October 2017. [http://www.economica.net/guvernul-taie-la-jumatate-subventiile-anl-pentru-construcia-de-locuinte\\_145213.html](http://www.economica.net/guvernul-taie-la-jumatate-subventiile-anl-pentru-construcia-de-locuinte_145213.html)

ANL, Locuinte pentru tineri-descrierea programului, 2015, <http://www.anl.ro/en/locuinte-pentru-tineri/>

Economica, ANL received, in 2019, 348 homes for young people for rent out of 2,093 under construction, August 2020.

<https://www.economica.net/anl-a-receptionat-in-2019-348-de-locuinte-pentru-tineri-destinate-inchirierii-din-2-093-aflata-in-188816.html>

MDRAP, Programul de constructii prin credit ipotecar. <http://www.mdrap.ro/lucrari-publice/-1763/-5440>

Economica, ANL received, in 2019, 348 homes for young people for rent out of 2,093 under construction, August 2020. <https://www.economica.net/anl-a-receptionat-in-2019-348-de-locuinte-pentru-tineri-destinate-inchirierii-din-2-093-aflate-in-188816.html>

Agentia Nationala pentru Locuinte, 2018. <https://www.anl.ro/en/locuinte-prin-credit-ipotecar/>

National Reform Programme 2020, Romania, April 2020. [https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-romania\\_en\\_0.pdf](https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-romania_en_0.pdf)

Ibidem.

Ibidem.

MDRAP, Programul National de Constructii de interes public sau social derulat prin intermediul Companiei Naționale de Investiții C.N.I. - S.A. <http://www.mdrap.ro/lucrari-publice/-7952>

EC (2019). European Semester, Country Report Romania. [https://ec.europa.eu/info/sites/info/files/file\\_import/2019-european-semester-country-report-romania\\_en.pdf](https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-romania_en.pdf)

Renovate Europe, Renovate2Recover: How transformational are the National Recovery Plans for Buildings Renovation? – Romania. <https://www.renovate-europe.eu/wp-content/uploads/2018/09/Renovate2Recover-ROMANIA.pdf>

National Reform Programme 2020, Romania, April 2020. [https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-romania\\_en\\_0.pdf](https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-romania_en_0.pdf)

DLA Piper, General construction law- Romania, September 2020. <https://www.dlapiperrealworld.com/law/index.html?t=construction&s=legal-framework&q=general-construction-law&c=RO>

Flanders Investment and Trade, The Construction Sector in Romania [http://www.flandersinvestmentandtrade.com/export/sites/trade/files/market\\_studies/249130909111522/249130909111522\\_1.pdf](http://www.flandersinvestmentandtrade.com/export/sites/trade/files/market_studies/249130909111522/249130909111522_1.pdf)

Deloitte, Tax & Legal Weekly Alert, October 2019. <https://www2.deloitte.com/content/dam/Deloitte/ro/Documents/tax/english/TLA-EN-31oct2019.pdf>

Maravela Asociatii, Amendments to Romanian legislation on building permits, urban planning and real estate registers. November 2016. <http://www.bizlawyer.ro/pdf/1478506585.pdf>

Noerr, Romania: New important amendments to Romanian construction and urban planning laws. January 2017. <https://www.noerr.com/en/newsroom/News/romania-new-important-amendments-to-romanian-construction-and-urban-planning-laws.aspx>

Legea nr. 177/2015 pentru modificarea și completarea Legii nr. 10/1995 privind calitatea în construcții. <http://www.isc-web.ro/content/garant-al-legalitatii-domeniul-construcțiilor.htm>

DLA Piper, Limitation period. <http://www.dlapiperrealworld.com/law/index.html?t=construction&s=liability&q=limitation-period&c=RO>

Practical Law, A Thomson Reuters Legal Solution, Construction and projects in Romania: overview. <http://uk.practicallaw.com/1-502-1619?source=relatedcontent#a224357>

DECISION no. 742 of September 13, 2018 regarding the modification of the Government Decision no. 925/1995 for the approval of the Regulation for verification and technical expertise of the quality of the projects, the execution of works and constructions <http://www.monitoruljuridic.ro/act/hot-r-re-nr-742-din-13-septembrie-2018-privind-modificarea-hot-r-rii-guvernului-nr-925-1995-nbsp-pentru-aprobarea-regulamentului-nbsp-de-verificare-i-expertizare-tehnic-de-calitate-a-proiectelor-a-execu-iei-lucr-rilor-i-205185.html>

DLA Piper, Insurances. <http://www.dlapiperrealworld.com/law/index.html?t=construction&s=forms-of-contract-procurement-methods&q=insurances&c=RO>

BR SPECIAL! Home insurance remains niche product in Romania. June 2018. <http://business-review.eu/money/insurance/br-analysis-home-insurance-remains-niche-product-in-romania-171740>

1asig.ro, Cat costa asigurarile de constructii in Romania? <http://www.1asig.ro/VIDEO-Cat-costa-asigurarile-de-constructii-in-Romania-articol-3,100-51408.htm>

BR SPECIAL! Home insurance remains niche product in Romania. June 2018. <http://business-review.eu/money/insurance/br-analysis-home-insurance-remains-niche-product-in-romania-171740>

This includes total investment by the construction and real estate subsectors, defined as gross fixed capital formation, i.e. acquisitions minus disposal, of total fixed assets (e.g. machinery and equipment, vehicles, dwellings and other buildings).

Data unavailable for subsequent years.

Data unavailable for subsequent years.

Data unavailable for subsequent years.

This includes total investment (i.e. gross fixed capital formation) in dwellings and non-residential construction and civil engineering by investors in the general economy (e.g. industry, financial and non-financial services, households, agricultural sector, etc.).

Data unavailable for subsequent years.

The indicator gross fixed capital formation in non-residential and civil engineering refers to the Eurostat indicator «Other buildings and structures»

According to the OECD, inland infrastructure includes road, rail, inland waterways, maritime ports and airports and takes account of all sources of financing.

Data unavailable for subsequent years.

Data unavailable for 2019.

Fitch Solutions, Romania Infrastructure Report, Q1 2022. [https://app.fitchconnect.com/search/research/article/BMI\\_05FF57B1-664F-462C-B5A7-261AAA7876CF?keyword=ROmania%20infrastr&filters=Fitch%20Ratings,BMI%20Reports&isGsearch=true](https://app.fitchconnect.com/search/research/article/BMI_05FF57B1-664F-462C-B5A7-261AAA7876CF?keyword=ROmania%20infrastr&filters=Fitch%20Ratings,BMI%20Reports&isGsearch=true)

Ibidem.

European Commission, NextGenerationEU: European Commission disburses €1.8 billion in pre-financing to Romania, December 2021. [https://ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_6471](https://ec.europa.eu/commission/presscorner/detail/en/IP_21_6471)

European Commission, Investment Plan: Romania. [https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/investment-plan-europe/investment-plan-results/investment-plan-romania\\_en](https://ec.europa.eu/info/strategy/priorities-2019-2024/economy-works-people/jobs-growth-and-investment/investment-plan-europe/investment-plan-results/investment-plan-romania_en)

European Commission, EU Cohesion Policy: EU invests in new road infrastructure in Romania, March 2021. [https://ec.europa.eu/regional\\_policy/en/newsroom/news/2021/03/24-03-2021-eu-cohesion-policy-eu-invests-in-new-road-infrastructure-in-romania](https://ec.europa.eu/regional_policy/en/newsroom/news/2021/03/24-03-2021-eu-cohesion-policy-eu-invests-in-new-road-infrastructure-in-romania)

Ibidem.

EU allots EUR 118 million to Romania for transport infrastructure projects, July 2020. <https://www.romania-insider.com/eu-funding-ro-infrastructure-projects-jul-2020>

European Commission, Education and Training Monitor 2021, Romania. <https://op.europa.eu/webpub/eac/education-and-training-monitor-2021/en/romania.html>

Ibidem.

Ibidem.

Ibidem.

Ibidem.

CEDEFOP, Romania: increased participation in initial dual vocational education and training, September 2020. <https://www.cedefop.europa.eu/en/news-and-press/news/romania-increased-participation-initial-dual-vocational-education-and-training>

European Commission, Education and Training Monitor 2021, Romania. <https://op.europa.eu/webpub/eac/education-and-training-monitor-2021/en/romania.html>

Ibidem.

Casa de Meserii a Constructorilor, Cursuri de formare. <https://www.cmc.org.ro/index.php/cursuri-207>

Ibidem.

The National Energy Regulatory Authority- On the progress achieved in the fulfilment of national energy efficiency objectives, April 2018. [https://ec.europa.eu/energy/sites/ener/files/documents/ro\\_annual\\_report\\_2018\\_en.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/ro_annual_report_2018_en.pdf)

Romanian Lawyers Week, New obligations concerning the energy performance of buildings, July 2020. <https://rlw.juridice.ro/17377/new-obligations-concerning-the-energy-performance-of-buildings.html>

Ibidem.

Ibidem.

Romania's Government approves energy plan, October 2021. <https://www.neimagazine.com/news/newsromanas-government-approves-energy-plan-9138648#:~:text=Romania's%20Government%20on%204%20October,the%20production%20of%20renewable%20energy>

Ibidem.

Please refer to the dedicated Policy Fact Sheet for further details.

Capital, Șapte ani de reabilitare termică pentru 3% dintre blocurile comuniste. June 2016. <http://www.capital.ro/sapte-ani-de-reabilitare-termica-pentru-3-din-blocurile-comuniste.html>

Renovate2recover: How transformational are the national recovery plans for buildings renovation? <https://www.renovate-europe.eu/wp-content/uploads/2018/09/Renovate2Recover-ROMANIA.pdf>

Ibidem.

Energy-efficient house programme launched in Romania, November 2020. <https://www.interregeurope.eu/agrores/news/news-article/10198/energy-efficient-house-programme-launched-in-romania/>

Ibidem.

Ibidem.

European Commission, EU Single Market Scoreboard. Romania, 2021. [https://single-market-scoreboard.ec.europa.eu/countries/romania\\_en](https://single-market-scoreboard.ec.europa.eu/countries/romania_en)

Ibidem.

Ibidem.

GAN Risk and Compliance Portal, Romania Corruption Report, 2020. <https://www.ganintegrity.com/portal/country-profiles/romania/>

Ibidem.

Digi24, OUG 13, definitiv îngropată. Președintele a promulgat legile care o abrogă. February 2017. <http://www.digi24.ro/stiri/actualitate/politica/oug-13-definitiv-ingropata-presedintele-a-promulgat-legile-care-o-abroga-675939>

European Commission, Country Report Romania 2020. February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0522&from=EN>

ICECON SA, Istoric. <http://www.icecon.ro/>

Ministerul Dezvoltării Regionale și Administrației Publice, Regulamentul (UE) 305/2011 - Punct de informare. <http://www.mdrap.ro/constructii/-4218>

JRC Report EUR 27511 EN, State of implementation of the Eurocodes in the European Union. 2015. <http://eurocodes.jrc.ec.europa.eu/showpublication.php?id=537>

World Bank Doing Business Report 2020 – Romania. <https://www.doingbusiness.org/content/dam/doingBusiness/country/r/romania/ROM.pdf>

Ibidem.

Inward FATS describe the overall activity of foreign affiliates resident in the compiling economy. A foreign affiliate within the terms of inward FATS is an enterprise resident in the compiling country over which an institutional unit not resident in the compiling country has control.

Data unavailable for subsequent years.

Outward FATS explains the activity of foreign affiliates abroad controlled by the compiling country.

241 Data unavailable for subsequent years.

242 Ministry for Business Environment Commerce and Entrepreneurship, Export Promotion Tools and Programs Directorate. 2018.  
<http://www.imm.gov.ro/directia-instrumente-si-programe-promovare-export>

243 Fitch Solutions, Romania Infrastructure Report, Q1 2022. [https://app.fitchconnect.com/search/research/article/BMI\\_05FF57B1-664F-462C-B5A7-261AAA7876CF?keyword=ROmania%20infrastr&filters=Fitch%20Ratings,BMI%20Reports&isGsearch=true](https://app.fitchconnect.com/search/research/article/BMI_05FF57B1-664F-462C-B5A7-261AAA7876CF?keyword=ROmania%20infrastr&filters=Fitch%20Ratings,BMI%20Reports&isGsearch=true)