



European Construction Sector Observatory

Country profile **Romania**

February 2020



In a nutshell

Over the 2010-2018 period, the Romanian GDP increased by 35.1%, amounting to RON 831.5 billion (EUR 173.8 billion) in 2018.

The overall business confidence in the Romanian economy improved over 2010-2018, on account of increased public infrastructure investment, rising household disposable income, favourable government schemes and lower interest rates.

The **volume index of production** of Romanian broad construction sector generally declined over the 2015-2018 period, mostly due to the weak performance of the production of civil engineering (-23.8%).

Production volume index in the civil engineering construction between 2015 and 2018

↓ 23.8%

In parallel, the **total turnover** in the broad construction sector increased by 24.6% between 2010 and 2018, mainly driven by growth in real estate activities (+69.0%), architectural and engineering activities (+46.1%) and manufacturing sub-sectors (+42.2%).

Turnover in the broad construction sector between 2010 and 2018

↑ 24.6%

At the same time, the **apparent labour productivity** of the broad construction sector decreased by 6.2% between 2010 and 2017. This growth is reflected in all the construction sub-sectors. These experienced substantial growth over the 2010-2018 period, particularly the architectural

and engineering activities sub-sector (+50.1%) followed by the real estate activities sub-sector (+40.8%). In contrast, the **gross operating surplus** of the broad construction sector decreased by 35.8% over 2010-2017, predominantly due to a fall in the narrow construction sub-sector (-27.8%) and manufacturing sub-sector (-17.1%). In turn, the total **gross operating rate** of the broad construction sector also declined by 7.6 percentage points, standing at 11.5% in 2018 (compared to 19.1% in 2010).

Total gross operating rate in the broad construction sector between 2010 and 2017 in percentage points

↓ 7.6%

Similarly, the **total employment** in the broad construction sector also declined by 5.7% over the 2010-2018 period, mainly due to decreases in number of employees in the narrow construction (-9.2%) and manufacturing (-5.7%) sub-sectors. This deterioration was partially off-set by positive improvements in the real estate activities (+11.5%) and architectural and engineering activities (+6.8%) sub-sectors.

Since 2015, **housing prices** have started picking up (+18.6%) for existing and new dwelling, reflecting a strong domestic housing demand. The issuance of residential building permits has increased by 1.2% compared to 2010, reaching 42,694 in 2018. In particular, the number of permits for two or more dwelling buildings has increased substantially (+173.4%) between 2010 and 2018.

House price index for total dwellings between 2015 and 2018



Number of buildings permits for two or more dwelling buildings



Romania had one of the highest overcrowding (46.3%) and severe housing deprivation rates (16.1%) in the EU in 2018. These indicators are significantly above the EU-28 average of 15.5% and 4.0% respectively, highlighting relatively poor housing conditions.

To improve the housing market situation, the Romanian government introduced several investment schemes to support the market. The First Home Programme, with a budget of RON 2.0 billion (EUR 418.0 million) for 2018, provides state guarantees of up to 50.0% of the value of the mortgage. Furthermore, the National Housing Agency is implementing several affordable home programmes, including the Rental Housing Units for Young People and the Mortgage-financed Dwellings Programme.

Over the past years, the decline in public spending on infrastructure projects has severely affected the quality of the existing infrastructure stock, especially regarding roads and highways. This issue

was further aggravated due to Romania's poor absorption rate of EU funds and public procurement practices. Nonetheless, significant investment activities have been planned under the General Master Plan for Transport, detailing strategic interventions in transport infrastructure up until 2030, amounting to EUR 43.5 billion (with EUR 27.1 billion for road and EUR 10.2 billion for railway projects). In addition, Romania also benefits from EUR 9.5 billion from the EU Regional Funds under the 2014-2020 Large Infrastructure Operational Programme (LIOP), to be invested in transport, environment and energy projects.

However, the construction sector is facing substantial labour shortage, particularly for insulation and thermal rehabilitation, with around 50,000 workers needed by the end of 2020 to satisfy this demand. To this end, both public and private training initiatives including dual-VET programmes and improved adult lifetime learning courses has been introduced to upskill the workforce.

Going forward, public infrastructure and residential construction are expected to drive the expansion of the Romanian construction sector, with the broad construction sector turnover expected to rise by 10.6% over the 2018-2020 period. Nonetheless, improved EU funds absorption, better project management, greater public procurement transparency and improved political stability are essential for the development of the sector at large.

Table of Contents

In a nutshell	2
1 Key figures	5
Construction market.....	5
Productivity	6
Turnover and profitability	6
Employment	7
2 Macroeconomic indicators	9
Economic development.....	9
Demography and employment.....	9
Public finance	9
Entrepreneurship and access to finance	10
3 Key economic drivers of the construction sector	11
Business confidence	11
Domestic sales	11
Export of construction-related products and services	12
Access to finance in the construction sector.....	12
Access to housing	13
Infrastructure.....	14
4 Key issues and barriers in the construction sector	15
Company failure	15
Trade credit	15
Late payment.....	16
Time and cost of obtaining building permits and licenses	16
Skills shortage	17
Sector and sub-sector specific issues	18
5 Innovation in the construction sector	19
Innovation performance.....	19
Eco-innovation and digitalisation	20
6 National and regional regulatory framework	22
Policy schemes.....	22
Building regulations.....	23
Insurance and liability related regulations	24
7 Current status and national strategies to meet Construction 2020 objectives	25
TO 1 – Investment conditions and volumes	25
TO 2 – Skills.....	27
TO 3 – Resource efficiency / Sustainable construction	28
TO 4 – Single Market	29
TO 5 – International competitiveness	31
8 Outlook	33

1

Key figures

Construction market

The **number of enterprises** in the broad construction sector in Romania totalled 97,180 in 2018¹. Companies in the narrow construction sub-sector accounted for 57.6% of the total, followed by real estate activities (17.6%), architectural and engineering (17.0%) and manufacturing (7.8%). The overall number of enterprises in the broad construction sector increased by 16.3% between 2010 and 2018.

Number of enterprises in the broad construction sector between 2010 and 2018  **16.3%**

After a drop from 83,559 in 2010 to 74,673 enterprises in 2011, the number of construction companies increased continuously from 2011 onwards (Figure 1).

The growth of the number of construction companies has been driven by a 26.8%, 26.0% and 13.4% growth in companies in the architectural and engineering, real estate activities and in the narrow construction sub-sectors respectively.

Volume index of production generally decreased in the broad construction sector. In particular, the volume index of production of the narrow construction sub-sector and civil engineering decreased by 12.2% and 23.8% respectively over the 2015-2018 period. Conversely, the volume index of production of buildings increased by 3.8% in the same period (Figure 2).

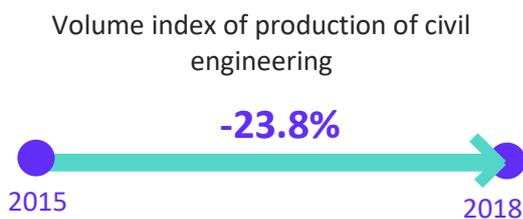
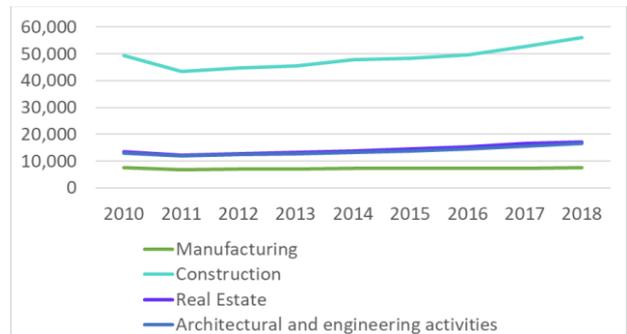
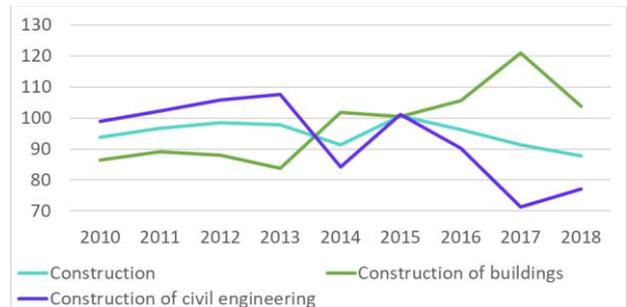


Figure 1: Number of enterprises in the broad construction sector in Romania between 2010 and 2018



Source: Eurostat, 2019.

Figure 2: Volume index of production in the Romanian construction sector between 2010 and 2018 (2015=100)



Source: Eurostat, 2019.

The total value added of the broad construction sector amounted to 10.2 billion in 2018.

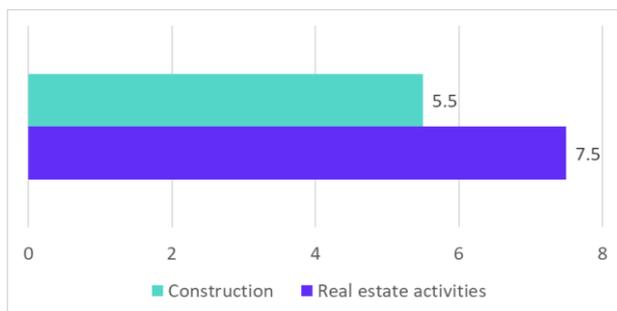
In 2018², the total **value added at factor cost** of the broad construction sector stood at EUR 10.2 billion. The narrow construction sub-sector had the largest share (54.9%, i.e. EUR 5.6 billion), followed by the manufacturing (16.1%, i.e. EUR 1.6 billion), real estate activities 17.9%, (i.e. EUR 1.8 billion), and architectural and engineering activities sub-sectors, 11.1% (EUR 1.1 billion).

In 2018, the **share of gross value added** of the real estate activities and narrow construction sub-sectors in the GDP³ reached 7.5% and 5.5% respectively (Figure 3). The share of the gross value

added of the broad construction sector (15.7% in 2017⁴) was slightly below the 2016 levels of 16.7% and the EU-28 average, which stood at 16.9%.

Romania is composed of eight NUTS-2 statistical regions. The gross value added is not equally distributed over Romania, with Bucharest (*Bucuresti*) region accounting for 28.9% of the gross value added in the narrow construction sub-sector and for 15.3% of the gross value added in the real estate activities sub-sector.

Figure 3: Gross value added as a share of GDP in the broad construction sector in Romania in 2018 (%)



Source: Eurostat, 2019.

Productivity

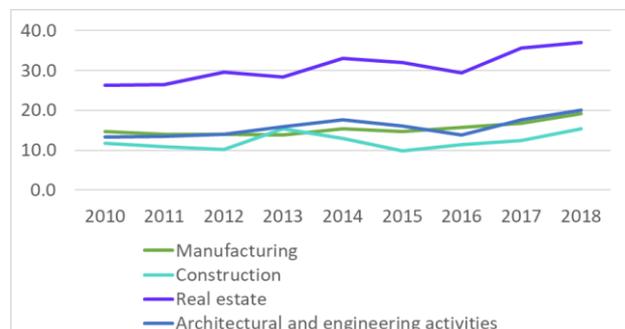
Despite some fluctuations, the **apparent labour productivity**⁵ in the broad construction sector remained stable when comparing 2010 and 2017, when it stood at EUR 13,358 and EUR 12,534 respectively. Though it is above the 2010 levels, the apparent labour productivity experienced a 22.8% decrease between 2013 and 2017, from EUR 16,231 in 2013 to EUR 12,534 in 2017. This was driven by the decreases experienced in the real estate activity and architectural and engineering activities sub-sectors. This is marginally below the 2016 level of EUR 13,731, and significantly lower than the 2016 EU-28 average of EUR 52,090.

Labour productivity in the broad construction sector



In all the construction sub-sectors under analysis (Figure 4), **the labour productivity** increased in all sub-sectors between 2010 and 2018. The architectural and engineering activities sub-sector saw the highest increase in productivity, with a 50.1% increase between 2010 and 2018. This was followed by the real estate activities and the narrow construction sub-sectors, which increased by 40.8% and 31.3%, respectively over the same period. Last, the labour productivity in the manufacturing sub-sector increased by 31.0% between 2010 and 2018.

Figure 4: Labour productivity in the broad construction sector in Romania between 2010 and 2018 (EUR k)



Source: Eurostat, 2019.

Turnover and profitability

The total turnover of the broad construction sector amounted to EUR 27.2 billion in 2017, 6.4% above the 2010 levels. It further reached EUR 31.8 billion in 2018⁶, a 24.6% increase relative to 2010.

This increase reflects the ongoing recovery of the broad construction sector from the pre-crisis level, though this is still below the 2008 level of EUR 36.5 billion. Specifically, turnover in the real estate activities sub-sector increased most, by 69.0% from EUR 2.1 billion in 2010 to EUR 3.6 billion in 2018. Turnover in the architectural and engineering activities and manufacturing sub-sectors increased significantly by 46.1% and 42.2% respectively over the same period.

In parallel, the **gross operating surplus** of the broad construction sector has declined by 35.8%, from EUR 4.9 billion in 2010 to EUR 3.1 billion in 2017 (less than half of its pre-crisis level).

Reflecting the evolution of the gross operating surplus, the **gross operating rate** of the broad construction sector⁷, which gives an indication of

the sector’s profitability, decreased from 19.6% in 2010 to 11.5% in 2017. This seems to indicate that profit margins of construction companies have significantly decreased. This may be explained by the strong increase in the material and labour costs (Figure 5).

The construction cost index fluctuated between 2010 and 2018, growing by 30.2 index points, In particular, the labour cost and the input prices for materials increased by 63.9 and 7.7 index points in the same period. Put in comparison to 2015, these indicators grew by 46% and 8.5% respectively.

Further, the Romanian government has increased the minimum wage, starting from January 2019. This is even higher for the construction sector than compared to other sectors – from RON 1,900 (EUR 397.1) to RON 3,000⁸ (EUR 626.9). Thus, a rise in labour cost index and subsequently, in the construction cost index, can be expected going forward.

Figure 5: Construction cost index between 2010 and 2018 (2015=100)

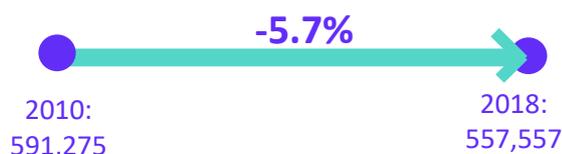


Source: Eurostat, 2019.

Employment

In 2018⁹, the broad construction sector **employed** 557,557 people, 5.7% lower as compared to 2010. The narrow construction sub-sector employed most of the broad construction workers, amounting to 365,659 people in 2018 (Figure 6).

Employment in the broad construction sector in Romania



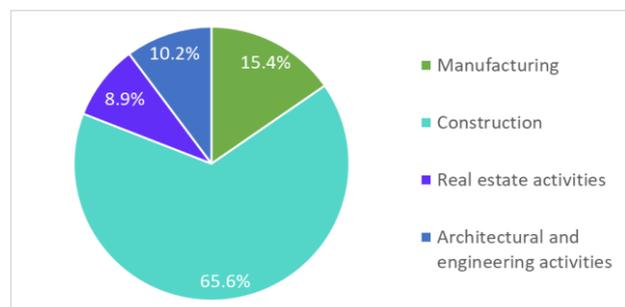
Employment in the real estate activities sub-sector experienced the highest growth between 2010 and 2018, with an increase of 11.5%, from 44,838 people in 2010 to 49,480 employees in 2018. Likewise, the architectural and engineering sub-sector, experienced a 6.8% increase over the same period (Figure 6).

Regionally, the Nord-Est region had the highest number of persons employed in the narrow construction sub-sector in 2016¹⁰.

However, the regions benefiting from the strongest increase of employment in the narrow construction sub-sector over the last years was the Nord-Vest and the Nord-Est regions. Employment decreased in all the other regions. When it comes to the real estate activities sub-sector employment, Bucharest concentrated the highest number of persons employed (10,400) in 2016. This is generally three times higher than the average number of employed persons in the real estate activities sub-sector in the other regions of Romania.

As for **employment by specific occupation**, the number of managers, technicians and associate professionals experienced one of the largest decline between 2010 and 2018, both for the manufacturing (-30.3% and -30.1% respectively) and the narrow construction (-34.5% and -45.0% respectively) sub-sectors. Craft and related trades workers represented the largest occupation for both sub-sectors and recorded an increase of 10.1% in the manufacturing sub-sector and 16.2% in narrow construction sub-sector, over the same period.

Figure 6: Percentage of people employed per construction sub-sectors in Romania in 2018



Source: Eurostat, 2019.



In 2018, self-employed workers in the narrow construction sub-sector represented 12.8% of the total of self-employed persons in the general economy.

SMEs have also been playing an increasingly important role in terms of employment, since they employed 86.8% of the total workforce of the Romanian broad construction sector in 2017, as compared to 80.1% in 2010.

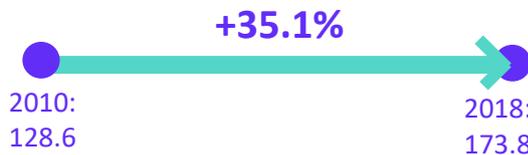
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Macroeconomic indicators

Economic development

In 2018, Romania's **GDP** amounted to RON 831.5 billion (EUR 173.8 billion), representing a 4.0% increase since the previous year and exceeding the 2010 level by 35.1%.

Romania's GDP in EUR billion

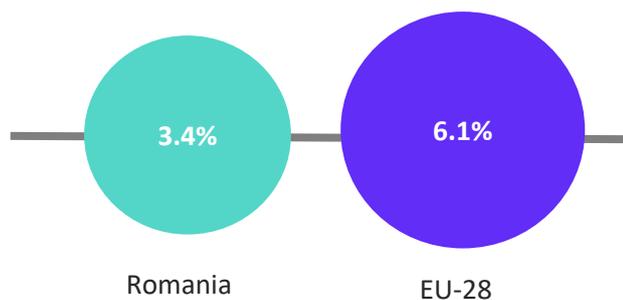


After witnessing negative inflation in 2015 and 2016, the **inflation rate** started recovering in 2017 and reached 4.1% in 2018, 2 percentage points lower as compared to 6.1% in 2010. This was explained by the effect of disinflationary tax cuts fades away and increased energy price. However, inflation is expected to moderate in 2019 (3.3%) and 2020 (3.1%)¹¹.

Demography and employment

The **unemployment rate** in Romania stood at 3.4% in 2018, well below the EU-28 average of 6.1% and the lowest since 2010. Youth unemployment (below the age of 25) stood at 16.2% in 2018, above the EU-28 average of 15.2% but below the 2010 level of 22.1%.

Unemployment rate in Romania in 2018



The **total population** of Romania amounted to 19.5 million people in 2018, a 3.8% drop compared to 2010. It is expected to drop further to 19.3 million by 2020 and 16.7 million by 2050. In particular, the negative **net migration** (-53,672 people in 2018) contributes to the population decline, potentially affecting the supply of workers.

In 2018, Romania's **working age population** accounted for 66.2% of the total and is projected to decrease considerably in the future, reaching 55.8% in 2050. Conversely, the population aged 65 or older accounted for 18.2% in 2018 and is forecasted to reach 29.9% by 2050. These demographic trends are expected to drive the demand for hospitals and care homes/facilities.

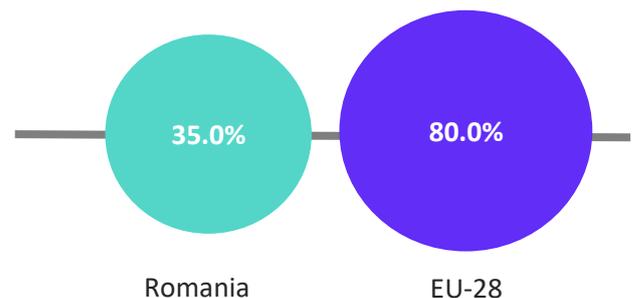
Public finance



In 2018, the **general government expenditure** in Romania represented 35.2% of the GDP. This is below the EU-28 average of 45.6%.

Its fiscal situation has been improving over time. Furthermore, the country achieved a **government deficit** of -3.0% of GDP in 2018, in line with the 3% threshold of the EU's Stability and Growth Pact (SGP) and a considerable improvement since the 2009 peak (-9.1%). However, the 2018 government deficit is higher than the 2015 levels of -0.6%.

Government gross debt, in percentage of the GDP in 2018



The general **government gross debt** amounted to 35.0% of GDP in 2018, significantly below the EU-28 average of 80.0%. The official **interest rate** of the Romanian Central Bank (*Banca Națională a României*) has shown a generally decreasing trend between 2010 and 2018, falling from 6.5% to 2.5%, respectively.

Entrepreneurship and access to finance

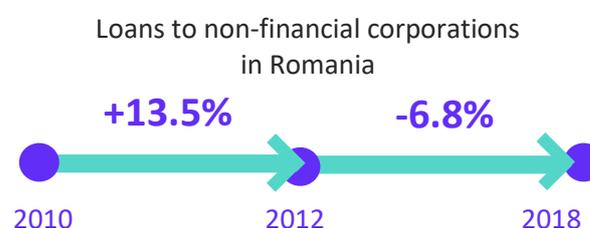
According to the 2020 Doing Business report, Romania stood at the 91th position out of 190 countries in terms of ease of starting a business¹², representing a notable decline from its 64th rank the previous year.

The costs for starting a business account for 0.3% of income per capita, considerably below the OECD high income average of 3.0%, and the required paid-in minimum capital is only 0.4% of income per capita, compared to the OECD high income average of 7.6%. However, completing all formalities to register a new firm takes 20 days and involves 6 procedures, compared to the OECD high income average of 9.2 days and 4.9 procedures, respectively.

According to the 2019 Small Business Act (SBA) Fact Sheet¹³, Romania performs above the EU-28 average in the area of **entrepreneurship**, in line with the 2018 results. The country presents one of the highest share - among EU members - of adults intending to start a business in the next three years (29.0% compared to the EU-28 average of 13.6%); high job creation expectation rate; entrepreneurship as a desirable career choice; high early stage entrepreneurial activity (including among women); and high media attention given to successful entrepreneurs.

Romania ranked 86th in the World Economic Forum 2019 Global Competitiveness Report in terms of financial system performance¹⁴.

The best performing indicator is soundness of banks (75th). Conversely, Romania ranks 82nd in terms of non-performing loans as a proportion of gross total loans and 89th in case of financing of SMEs. The country also ranks 104th for venture capital availability and 105th regarding the access of domestic credit to private sector. Indeed, access to financing is reported to be the first barrier for doing business, followed by inefficient government bureaucracy and tax rates. Despite an overall 13.5% increase between 2010 and 2012, from RON 104.6 billion (EUR 21.9 billion) to RON 118.8 billion (EUR 24.8 billion), **loans to non-financial corporations** declined by 6.8% over 2012-2018, reaching RON 110.7 billion (EUR 23.1 billion) in 2018.



Financial support to SMEs is also provided through EU funding and especially the European Investment Fund (EIF). The latter played a key role in financing SMEs through the JEREMIE (Joint European Resources for Micro to Medium Enterprises) initiative, through which a portfolio risk sharing loan, portfolio guarantee and equity fund were created. Additionally, in October 2018, the EIF announced that it was willing to increase up to EUR 250 million the budget for the SME initiative Romania, expecting to generate more than EUR 1.3 billion of new SME loans at favourable terms¹⁵. The EIF further is currently planning to implement the JEREMIE Romania Reflows Equity Instrument, with an initial budget of EUR 50m¹⁶.

3

Key economic drivers of the construction sector

Business confidence

The **consumer confidence** indicator has been negative since 2000, reaching its lowest level in 2010 at -43.7, following the crisis. Despite some fluctuations, it has been improving since then, reaching -14.7 in 2018. Similarly, the **industry confidence** indicator increased from -8.4 in 2010 to reach 0.9 in 2018. After dropping to -40.8 in 2010, the **construction confidence** indicator increased to -10.9 in 2018. While overall confidence in the Romanian construction sector greatly increased, it still remains below most of the EU-28 average, which stood at -6.9, -2.4 and 3.6 respectively for the three indicators above.

Reflecting the increased confidence in the economy, **investment per worker** increased by 34.2% in the narrow construction sub-sector between 2010 and 2017. However, it declined by 3.0% and 19.4% in the manufacturing and architectural and engineering activities sub-sectors, respectively¹⁷.

Investment per worker in narrow construction sub-sector in Romania



Conversely, the **investment ratio** did not pick up since 2012 (26.3%). In fact, the investment ratio reached its lowest rate in 2018 (21.2%) as compared to 25.0% in 2010.

Domestic sales

The ranking of the **most domestically sold construction products** has changed considerably over the 2010-2018 period, with 'Motors' and 'Builders' joinery and carpentry, of wood, n.e.c.' being replaced by 'Other structures and parts of structures, etc.' and 'Particle board'. 'Portland cement, aluminous cement, etc.' continued to represent the highest share of the domestic sales, with a small growth rate of 2.4% over the 2010-2018 period. The largest growth was recorded in the value of domestic sales in 'Prefabricated buildings of metal' (+36.1%), followed by 'Ready-mixed concrete' (+31.7%) over the same period.

The top five most domestically sold construction products represented 52.6% of all Romanian construction products sales in 2018.

The top 5 most domestically sold construction products, both in Romania and in the EU-28, are presented in Table 1.

Table 1: 5 most domestically sold construction products in Romania and in the EU in 2018

		Romania		EU-28
	Product	Value (EUR m)	Share in construction product domestic sales (%)	Product
1	Portland cement, aluminous cement, etc. (group 235112)	507.9	15.0	Other structures and parts of structures, etc. (group 251123)
2	Prefabricated buildings of metal (group 251110)	434.0	12.8	Doors, windows and their frames (group 251210)

3	Ready-mixed concrete (group 236310)	332.5	9.8	Ready-mixed concrete (group 236310)
4	Other structures and parts of structures, etc. (group 251123)	256.5	7.6	Prefabricated buildings of metal (group 251110)
5	Particle board (group 162112)	244.6	7.2	Prefabricated structural components for building, etc. (group 236112)

Source: PRODCOM, 2019.

Export of construction-related products and services

The five most exported construction products, in Romania (Table 2) accounted for 48.3% of all construction exports from Romania in 2018.

Since 2010, the ranking of the most five exported products has changed drastically. Except for 'Builders' joinery and carpentry, of wood, n.e.c.', all other products have been replaced by new products in the top five exports rankings. The exported value of 'Builders' joinery and carpentry, of wood, n.e.c.' saw an increase of 310.2% over the 2010-2018 period. Compared to 2017¹⁸, the exported value of 'Veneer sheets and sheets for plywood, etc.' rose by 10.3%. Conversely, the exported value of all other products within the top five ranking declined with the largest decline being in 'Particle board' (-27.0%) followed by 'Oriented strand board (OSB)' (-17.9%) over the same period.

Table 2: 5 most exported construction products in Romania and in the EU in 2018

Romania			EU-28
	Product	Value (EUR m)	Share in construction exports from country in 2017 (%)
1	Particle boards (group 162112)	162.9	13.2
2	Oriented strand board (OSB) (group 162113)	144.5	11.7

3	Veneer sheets and sheets for plywood, etc. (group 162124)	99.7	8.1	Fibreboard of wood, etc. (group 162115)
4	Builders' joinery and carpentry, etc. (group 162319)	97.1	7.9	Marble, travertine, alabaster, etc. (group 237011)
5	Fibreboard of wood, etc. (group 162115)	92.5	7.5	Prefabricated buildings of metal (group 251110)

Source: PRODCOM, 2019.

In terms of **cross-border provision of construction services**¹⁹, Romania exported EUR 447.1 million worldwide in 2018, 6.9% above the 2013²⁰ value (EUR 418.2 million). In particular, 90.3% of exports (EUR 403.7 million) were meant to the EU-28 Member States, i.e. 16.6% above the 2013 level (EUR 346.2 million).

Similarly, the value of exports to countries outside the EU-28 region decreased by 39.4%, reaching EUR 43.6 million in 2018. In parallel, Romania imported a total of EUR 82.5 million in construction services from the world in 2018, representing a 58.7% drop since 2013 (EUR 199.6 million). Imports from EU-28 countries stood at EUR 78.9 million in 2018 (i.e. 95.3% of total imports). Romania therefore reported a **trade surplus** of EUR 364.6 million in 2018.

Access to finance in the construction sector

The value of credit extended to the narrow Romanian construction sub-sector has displayed a negative trend since 2013.

Overall, between 2010 and 2018²¹, the **credit extended to the narrow construction** sub-sector decreased from RON 304.5 billion (EUR 63.6 billion) to RON 258.3 billion (EUR 54.0 billion), marking a 15.2% drop.

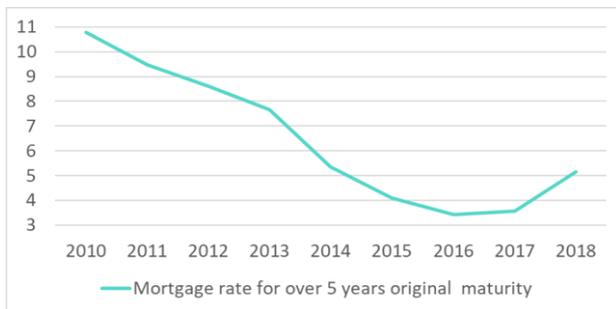
In general, due to their limited financial capacities and credit history, construction and real estate companies have a limited borrowing potential, being less able to qualify for new loans. Furthermore, they report the highest credit risk, with a probability of default for firms in the real estate and in the construction sector being amongst the highest.

The 2018 EIB Group Survey on Investment and Investment Finance shows that around 8.0% and 12.0% of firms are **finance constrained**²² in the manufacturing sector and in the narrow construction sub-sector²³ respectively.

Access to housing

The **number of households** in Romania reached 7,494,300 in 2018, 1.2% higher than 2010 (7,402,000). In 2018, 35.0% of the population lived in cities and greater cities, a 0.2% increase compared to 2010. The **mean equivalised net income** has increased by 73.8%, from RON 10,054 (EUR 2,371) in 2010 and amounting to RON 17,475 (EUR 3,825) in 2018, giving households a larger purchasing power. In parallel, **mortgage rates** have fallen continuously since the peak in 2009, from 11.1% to 5.2% in 2018 (Figure 7). These factors, though partly offset by the negative migration rates and demographic slowdown, contribute to the increasing housing demand, which focuses on urban areas.

Figure 7: Mortgage rates for loans for over 5 years original maturity (%)



Source: ECB MFI Interest Rate Statistics, 2019.

Consequently, the **total outstanding housing loans** to households experienced a 133.9% surge since 2010, going from EUR 6.8 billion to EUR 15.8 billion in 2018. This is also the result of policy schemes such as the First Home Programme (See Section 6 on National and regional regulatory framework).

On the supply side, construction of residential buildings picked up, supported by the recovery housing prices. While the **house price index** for total dwellings experienced a 0.9 percentage point decrease between 2010 and 2018, it has increased by 18.6% between 2015 and 2018 (Figure 8). This is driven by a 20.5% and 9.9% increase in the price of existing dwellings and new dwellings respectively. The recovery of property prices has been particularly noticeable in Romania's largest cities

during 2018, such as Brasov (+9.4%), Cluj-Napoca (+6.7%), Bucharest (+6.0%), Timisoara (+4.8%) and Constanta (+2.0%)²⁴.

Similarly, between 2010 and 2018, issued **residential building permits** increased by 1.2%, reaching 42,694 in 2018 and 39,359 by November 2019²⁵. The number of issued building permits for one-dwelling building decreased by 4.9% between 2010 and 2018. In parallel, the number of building permits for two or more dwelling buildings increased substantially, by 173.4% between 2010 and 2018.

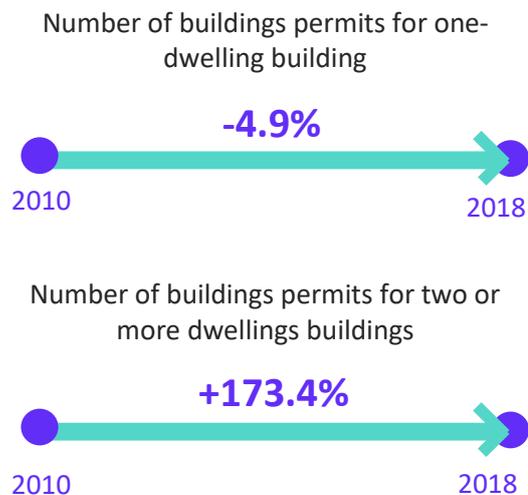
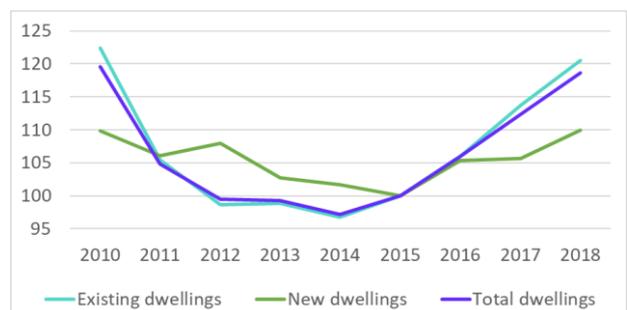


Figure 8: House price index in Romania between 2010 and 2018 (2015=100)

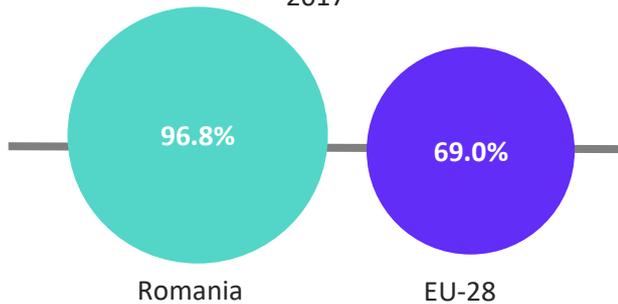


Source: Eurostat, 2019.

The **homeownership rate** in Romania is the highest in the EU-28 region, with 96.4% of the population owning their own property in 2018 (compared to the EU-28 average of 69.3% in 2018²⁶). This share does not display major differences between the population whose income is above or below 60% of the median equivalised income, with the homeownership rate standing at 96.8% and 95.3% for the two income groups, respectively.

The **housing cost overburden rate**²⁷ stood at 10.3% in 2018, above the EU-28 average of 10.4%²⁸, highlighting housing affordability issues. Moreover, housing quality in Romania is poor, with the **overcrowding rate**²⁹ in 2017 being at 46.3%, well above the EU-28 average of 15.5% and one of the worst in the EU-28³⁰. Similarly, the **severe housing deprivation rate**³¹ reached 16.1% in 2018, the highest in the EU-28 and considerably above its average of 4.0%. Such high deprivation rate, in turn, leads to problems of social exclusion. The housing stock in Romania lacks in quality and efficiency. In fact, one in seven households is confronted with serious housing issues (humidity, lack of sanitary facilities etc.). Further, lack of maintenance has resulted in additional deterioration of the existing stock, making Romania the least performing EU Member State in respect to this indicator³².

Homeownership in Romania and in the EU in 2017



Infrastructure

According to the 2019 Global Competitiveness Report, Romania ranks 55th out of 141 economies in terms of its infrastructure³³.

Romania ranks 55th in terms of road connectivity, 57th as regards to airport connectivity and 58th for linear shipping connectivity. In terms of efficiency, it ranks 71st in air transport services and 76th for train services. Romania performs particularly poorly with regards to the quality of road infrastructure, ranking 119th³⁴.

The poor quality of the Romanian infrastructure partly stems from the lack of a structured framework for the selection, prioritisation and execution of public infrastructural projects, and the dominance of large and inefficient state-owned companies, particularly in the transportation network³⁵. Moreover, political interference and the lack of professional capacity to manage large projects are stressed as important hurdles in the development of infrastructures in Romania. Particularly, changes in political priorities and corruption have stifled investments and blocked the deployment of EU funds, crucial in the construction of new infrastructures³⁶.

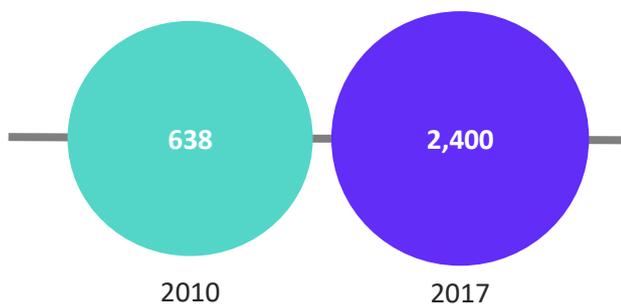
4

Key issues and barriers in the construction sector

Company failure

The broad construction sector has generally seen an increase in the number of company births and a decrease in company deaths across all sub-sectors between 2010 and 2017. Namely, **company births** in the narrow construction sub-sector increased from 4,559 in 2010 to 10,477 in 2017 (+129.8%), whereas the number of **deaths** decreased from 10,038 in 2010 to 7,800 in 2017 (-22.3%). Company births in the architectural and engineering activities sub-sector increased from 638 in 2010 to 2,400 in 2017 (+276.2%), whereas company deaths decreased from 2,596 to 1,737 in 2017 (-33.1%). Lastly, company births in real estate activities sub-sector also increased from 957 to 2,326 over 2010-2017 (+143.1%), whereas company deaths decreased from 2,036 to 1,465 (-26.9%).

Company births in the architectural and engineering activities sub-sector



The Romanian construction sector continues to have the second highest number of insolvencies in the Romanian economy, just behind the retail and wholesale sector.

According to the National Trade Registry's Office, by November 2019, 909 construction firms went

insolvent in 2019, compared to the same time frame for 2018 (1,246)³⁷. This represents a 67.6% drop compared to number of insolvencies in the construction sector in 2010³⁸. As for real estate activities sub-sector, 146 companies were declared insolvent by November 2019, a 39.7% decline compared to November 2018 and 84.6% decrease compared to 2010.

By November 2019, insolvencies in real estate activities sub-sector represented 2.5% of total insolvencies, slightly less than in the previous year (3.1%). Similarly, the share of insolvency in the construction sector decreased from 16.1% in 2018 to 15.6% in 2019³⁹.

Despite these improvements, the Romanian Association of the Romanian Building Industry (*Asociația Română a Antreprenorilor de Construcții* - ARACO) states that, to truly reduce the number of insolvencies in the sector, government measures supported by European programmes and investments are essential. Regulations and incentive around the restructuring of insolvent construction companies may need to be rethought. Legal administrators cash around 10% of the total value of the liquidated assets, and are not therefore being incentivised to restructure the insolvent businesses.

Trade credit

According to Atradius Payment Practice Barometer 2019, there has been a significant increase in use of trade credit to promote B2B sales in foreign markets⁴⁰. Since 2018, the proportion of trade credit has increased in Romania from 20.2% in 2018 to 68.2% of total sales in 2019, slightly higher than the Eastern Europe average of 67.2% for the same period⁴¹.



This considerable rise in the use of trade credit in Romanian economy is driven by higher private consumption on the domestic market and continued push from Romanian exporters to increase foreign sales.

According to the October 2019 survey on the access to finance of enterprises (SAFE)⁴², trade credit is widely used in Romania with 35.2% of the SME respondents considering it relevant for their business. About 22.2% of the SME respondents have obtained trade credit from their business partners in the last six months, compared to EU-28 average of 16.7%. Almost 41.6% of the SME respondents had applied for trade credit financing in the last six months (against the EU-28 average of 31.7%) out of which 72.9% of the applicants received the full amount, in line with the EU-28 average of 73.5%.

The introduction of tax on bank assets is further expected to negatively impact the availability of bank financing in the coming months. In such a situation, the Romanian suppliers will be compelled to cut on-costs to offset increased capital costs⁴³.

Late payment



According to the European Payment Report 2019, late payments continue to be a pressing issue for the Romanian companies⁴⁴.

Compared to last year, more Romanian companies are concerned about debtor payment failure with about 28.0% of the companies surveyed expecting a rise in risk from debtors in the coming twelve months (against 19.0% in 2018). With regards to late payment by debtors, around 78.0% of the Romanian companies are concerned about receiving payments past their due date, as compared to the 51.0% EU-28 average. Similarly, 78.0% of the Romanian companies find longer payment terms more difficult to manage compared to the EU-28 average of 50.0%⁴⁵.

Nonetheless, there have been some improvements in 2019 with payment transactions taking lesser duration to complete on average. In business to

customer (B2C) transactions, the average payment term dropped to 19 days in 2019 compared to 25 days in 2018. Business to business (B2B) and public sector transactions also took shorter duration, with 33 and 27 days respectively – in comparison to 36 and 48 days in 2018. Despite such progress, the time actually taken for the complete payment is still higher than the payment terms originally allowed by companies – B2C (23 in 2019 against 18 in 2018), B2B (41 in 2019 against 35 in 2018) and public sector transactions (45 in 2019 against 43 in 2018)⁴⁶.

Financial difficulties constitute the primary factor behind the delayed payments by debtors (70.0% against EU-28 average of 54.0%). Administrative inefficiencies of customers (66.0% compared to EU-28 average of 48.0%) and intentional late payments (54.0% against EU-28 average of 50.0%) are other prominent causes for delayed payments⁴⁷.

The Romanian construction sector has a continued history of **late payments**. Despite the transposition of the 2011 Late Payment Directive with Legea 72/2013 in April 2013, payment culture is still worrisome, particularly from the public administration⁴⁸. Romania also has the largest share in Central and Eastern Europe (CEE) of construction companies paying their suppliers late.

According to Days Sales Outstanding (DSO), the national average for payment duration is 46 days in 2019, slightly below the Eastern Europe regional average of 48 days⁴⁹. Late payments in the construction sector are mainly due to the lack of liquidity of the companies, creating delays in repaying debt or other trading partners⁵⁰.

Time and cost of obtaining building permits and licenses

Romania ranked 147th out of 190 in 'Dealing with Construction Permits', according to the World Bank's Doing Business Report 2020.

This represents a decline of one position from last year's ranking (146th in 2019). Completing the formalities to build a warehouse⁵¹ requires **24 administrative procedures** (above the OECD high-income average of 12.7) and takes **260 days** (well above the 152.3 OECD high income average)⁵². The estimated cost to complete the formalities to build

a warehouse stood at 2.0% of the cost of the warehouse, slightly higher than the OECD high-income average of 1.5%. Namely, the **building permit** takes 30 days to obtain and costs RON 23,644 (EUR 4,941.1). 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 connection⁵³.

Table 3: Construction procedures timing and costs in Romania

Procedure	Time to complete	Associated costs
Obtain topographical documentation	7 days	RON 2,000 / EUR 418.0
Obtain approval of topographical documentation and land registry excerpt	15 days	RON 270 / EUR 56.4
Obtain urban planning certificate (<i>Certificat de Urbanism</i>)	30 days	RON 14 / EUR 2.9
Obtain project clearance from Bucharest Regional Environmental Protection Agency	21 days	RON 500 / EUR 104.5
Obtain project clearance from water supply and sewerage authority	18 days	RON 334 / EUR 69.8
Obtain project clearance from the electric power supply authority	15 days	RON 95 / EUR 19.9
Obtain project clearance from General Inspectorate for Emergency Situations	15 days	No charge
Obtain project clearance from Health Department	7 days	RON 250 / EUR 52.2
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 557.3
Notarize statement about nonexistence of land disputes	1 day	RON 15 / EUR 3.1
Register project with the Order of Architects & pay architecture stamp duty	1 day	RON 1,232 / EUR 257.5
Obtain building permit	30 days	RON 23,644 / EUR 4,941.1
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 2,470.6
Notify the Bucharest Labour Inspectorate of	1 day	No charge

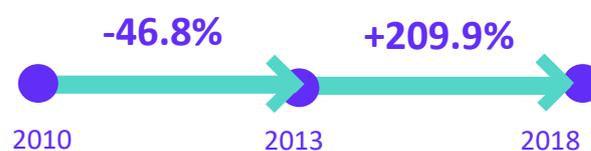
Procedure	Time to complete	Associated costs
the start of construction		
Receive foundations work inspection	1 day	No charge
Receive frame inspection	1 day	No charge
Notify City Hall of completion of works and request final assessment	1 day	No charge
Notify Bucharest Construction Inspectorate of completion 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 480.7
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 259.6

Source: Doing Business overview for Romania, World Bank, 2019.

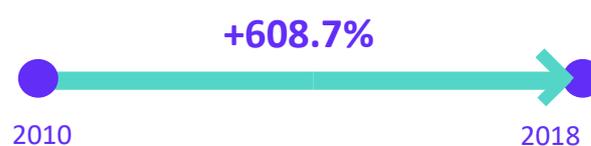
Skills shortage

The number of **job vacancies** in the narrow construction sub-sector decreased by 46.8% between 2010 and 2013, from 1,483 to 789. Nevertheless, they picked up since then, reaching 2,445 in 2018, and representing a 64.9% increase since 2010. In the case of real estate activities sub-sector, the number of vacancies grew significantly by 608.7%, from 26 in 2010 to 184 in 2018.

Job vacancies in construction activities



Job vacancies in real estate activities



In parallel, **adult participation in education and training** in the construction sub-sector stood at a

mere 2.2% in 2013 – which is nevertheless higher than the 2009 levels (1.2%)⁵⁴. Moreover, the number of **tertiary students in engineering, manufacturing and construction** decreased by 41.2% from 37,596 in 2010 to reach 22,106 in 2017. Specifically, tertiary students in engineering, manufacturing, architectural activities dropped by 48.1%, 46.0% and 35.2% respectively over the 2010-2017 period.

Romania is currently facing high labour shortages in the construction sector. In addition, this is expected to increase following the volume of production increase recently observed. According to the Federation of Owners of Building Companies (*Federatia Patronatul Societatilor din Constructii* – PSC), there will be a lack of more than 200,000 workers in the construction sector in coming years, *inter alia*, in order to build projects funded by the EU⁵⁵.

Sector and sub-sector specific issues

Material efficiency and waste management

In the European Union, construction and demolition waste (CDW) is one of the heaviest and most voluminous waste streams. CDW accounts for approximately 25% - 30% 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. In 2016, Romania reported 320,811 tonnes of waste, categorized as hazardous and non-hazardous, from the construction activities. This represents a decrease of 69.4% in the waste generation compared to 2014 levels, which is

negligible when compared to the EU-28 average of 923.7 million tonnes⁵⁶.

Although there is currently no specific legal framework governing the management of C&D waste, art.17 of the Law nr. 211/2011 defines the obligation to achieve a level of valorisation of 70% of the mass of the non-hazardous waste from construction and demolition activities in 2020, in compliance with Directive 2008/98/EC. It indicates measures such as the effective separation of C&D waste from other wastes, monitoring of its real composition, processing and separation of C&D waste materials based on mobility, and reutilisation of resulting fractions in road infrastructure⁵⁷.

In 2017, Romania adopted a national waste management plan 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 non-compliance with the 2020 municipal waste recycling target of 50%⁵⁸.

Climate and energy

Emissions of greenhouse gases (carbon monoxide and dioxide, methane, nitrous oxides and particulate matter) from the narrow construction and real estate activities sub-sectors amounted to 3,126,687 tonnes and 496,610 tonnes in 2018, respectively. This represents an increase of 21.8% for the narrow construction sub-sector and 4.8% for real estate activities sub-sector since 2010. Romania is lagging on several fronts including green infrastructure, disaster resilience and rehabilitation of old contaminated sites⁵⁹.

5

Innovation in the construction sector

Innovation performance

According to the 2019 European Innovation Scoreboard, Romania continues to be the least performing country in the EU-28 region, in terms of innovation and R&D performance.

With an overall innovation and R&D expenditure performance below the EU-28 average, Romania is classified as a **Modest Innovator**, the lowest classification according to the European Innovation Scoreboard 2019⁶⁰. After witnessing a strong decline between 2011 and 2015, Romania's performance started to improve from 2016 onwards.

The country's relative strengths lie in an innovation-friendly environment and sales impacts. Broadband penetration and medium and high-tech product exports also score well, above the EU-28 average. In parallel, Romania's relative weaknesses lie in innovators, firm investments and human resources. The country scored the lowest in 2018 across all Member States in lifelong learning, SMEs with product or process innovations, SMEs with marketing or organizational innovations and SMEs innovating in-house indicators⁶¹.

Business enterprise R&D expenditure (BERD) in the broad construction sector increased between 2010 and 2017 (Figure 9). BERD in the narrow construction sub-sector hence grew by 555.9% between 2010 and 2017⁶², from EUR 2.9 million to EUR 19.2 million. In fact, this surge happened in 2016, at a time where the BERD stood at EUR 0.5 million. This can partly be attributed to the government introducing an emergency ordinance 3/2017 – a 10-year tax exemption for R&D firms⁶³. Likewise, the professional, scientific and technical activities reported the highest BERD expenditure in 2017, amounting to EUR 200.1 million and representing a 2,859.0% increase between 2010 and 2017.

BERD expenditure in professional, scientific and technical activities, EUR million

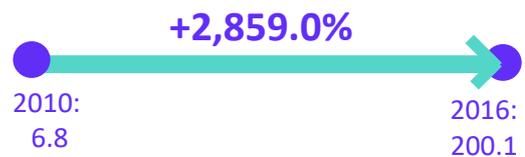
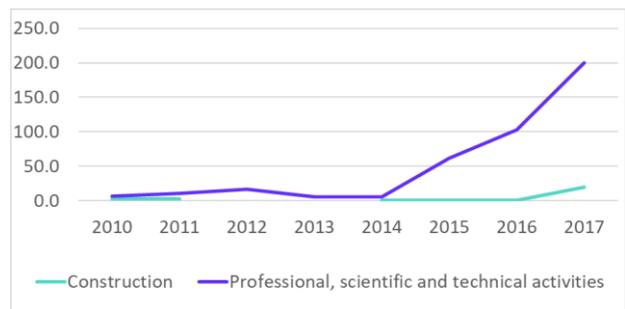


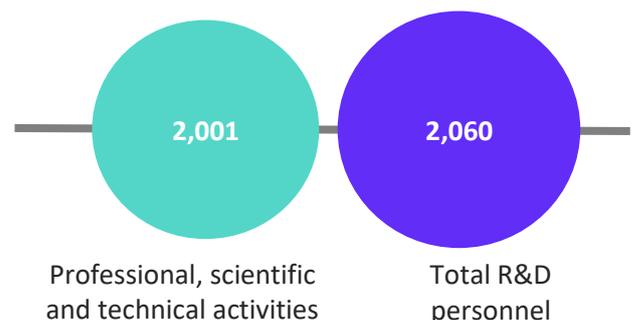
Figure 9: Business enterprise R&D expenditure (BERD) per construction sub-sector in Romania between 2010 and 2017⁶⁴ (EUR m)



Source: Eurostat, 2019.

In line with the BERD expenditure, the total **R&D personnel** (full-time equivalents – FTE⁶⁵) in the professional, scientific and technical activities sub-sector reported the largest number of FTE. It increased by 758.8% over 2010-2017 period, from 233 to 2,001. The number of R&D personnel in the narrow construction sub-sector fell by 52.8%, from 125 in 2010 to 59 in 2017.

Total R&D personnel (full-time equivalents), 2017



In parallel, the number of **construction-related patent applications** was very low, standing between 0 and 2 annually between 2010 and 2018 (1). Furthermore, no Romanian construction-related firms were part of the top 1,000 EU companies by R&D (industrial sector ICB-3D)⁶⁶.

Under the 'Catching Up Regions Initiative', smart specialisation strategies and governance structures has 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 regions⁶⁷.

Eco-innovation and digitalisation

According to the European Commission's Digital Economy and Society Index (DESI) 2019, Romania ranks 27th out of the 28 EU Member States the same position compared to the 2018 DESI ranking⁶⁸.

Despite showing slight improvements in most of the of the DESI dimensions, Romania's ranking remained constant due to an overall slow progress. The country performed best in the connectivity dimension, primarily driven by the wide availability of fast and ultra-fast fixed broadband networks (especially in urban areas). Economic digitisation continues to lag mostly due to low demographic digital exposure - more than one-fifth of Romanians have never used the internet while less than one-third has basic digital skills. Despite having a large proportion of e-government users (7th in EU-28 region), Romania has the lowest performance among all the EU Member States with regards to the digital public services dimension⁶⁹.

Almost 45.0% of the total Romanian households subscribe to ultra-fast broadband – the third highest figure in the EU-28 region.

In February 2015, Romania adopted its National Strategy on the Digital Agenda for Romania 2020 (SNADR), setting out four actionable areas. However, implementation progress has been limited. In 2016, the Romanian government launched a Manifesto for Digital Romania,

highlighting principles to be aligned with a vision for a digital future. Yet, a clear national strategy for digitising the economy is still not available. In fact, the proportion of firms using electronic information sharing declined from 22.0% in 2015 to 17.0% in 2017⁷⁰.

The **National Strategy for Research, Development and Innovation for 2014-2020** (*Strategia națională de cercetare, dezvoltare și inovare 2014-2020*) highlights the importance of the modernisation of the current research infrastructure and identifies the financial support for the construction of new and development of existing infrastructure as a key priority area⁷¹. 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 C&D waste valorisation. It is also involved in the development of technical regulations, standards and good practices in construction, in line with EU regulations⁷².

Between 2018 and 2019, the Romanian government adopted the '2030 National Strategy For Sustainable Development' (*Strategia Națională pentru Dezvoltarea Durabilă 2030*) with the aim to establish a framework for improving the country's economic, social and environmental conditions by focusing on innovation and sustainability⁷³.

There is currently a push in Romania for a wider usage of Building Information Modelling (BIM). The **BIM** is defined as a set of technologies, processes and policies enabling multiples stakeholders to collaboratively design, construct and operate a Facility in a virtual space⁷⁴. 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 and is often pushed by foreign investors who require its usage to all parties involved in the construction projects. In order to raise awareness, the Society of Construction Law in Romania offers Seminars on BIM. Still, more trainings should be offered in order to increase the currently low level of usage

of BIM in Romania⁷⁵.

Romania Green Building Council⁷⁶ is also part of the construction landscape in the country. The association is a non-profit organisation aiming to promote environmental responsibility and energy

efficiency. The council regroups numerous organisations and companies in the construction industry, to promote and support sustainable development in construction⁷⁷.

6

National and regional regulatory framework

Policy schemes



Romania implemented various national initiatives including the First Home Programme, the reduced VAT, or the programme implemented by the National Housing Agency.

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 guarantees of up to 50.0% of the value of the mortgage offered by adhering banks⁷⁸. Overall, since 2009 and until November 2017, 238,305 were granted worth a total of RON 20.8 billion (EUR 4.4 billion)⁷⁹. In 2019, the First Home programme was renewed, while going through some minor changes and becoming “more social”. For 2019, the budget is planned to be around RON 2.0 billion (EUR 418.0 million)⁸⁰ and is planned to decrease in the following years, to reach RON 1.5 billion (EUR 315.6 million) budget in 2021⁸¹⁸². Given the smaller budget, the eligibility criteria are expected to be stricter. Specifically, the scheme is expected to only be available to Romanian with incomes below RON 5,000 (EUR 1,072.3) per month.

Under the implementation of the National Programme on Increasing Energy Performance in Housing Blocks, almost 419 apartments were completed in 2018, amounting to RON 5.5 million (EUR 1.1 million). For 2019, RON 20.0 million (EUR 4.2 million) was credited as budget with additional commitments of about RON 55.0 million (EUR 11.5 million)⁸³.

Another policy in place fostering the access to housing is the **reduced 5% VAT rate** applicable for dwellings valued under RON 450,000 (EUR 94,041) and with a maximum usable area of 120 square meters, excluding any housing annexes. Moreover, at the time of purchase, the dwelling should be fit to live, and the land below the house or the apartment cannot exceed 250 square meters⁸⁴. This programme, combined with the increase in salaries, led to an increase in residential demand as from 2016⁸⁵.

Given the high rate of severe housing deprivation, housing affordability issues (see Section on Access to housing) 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. For 2018, the budget coming from state subsidies for housing construction was cut by 52.0%, standing at RON 128.8 million (EUR 26.9 million)⁸⁶.

The Romanian government is also in the process of drafting the Law on reviewing the National Spatial Plan, Section IV Localities network; National Housing Strategy as well as Law on Housing⁸⁷.

The **Rental Housing Units for Young People** (*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 lease⁸⁸.

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 the local authorities to the ANL⁸⁹.

The National Housing Agency implemented new programmes, to help the Roma communities and to address the needs of public employees living in rural areas.

Two other programmes, under the frame of the ANL are also aiming to improve the housing condition in the country. The first one, **Social Dwellings for Roma Communities** (*Locuinte 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 quality⁹⁰.

The **Rebirth of the Romanian Village** (*Renasterea Satului Romanesc*), is another programme under the ANL that aims to address the needs of the public employees (doctors, nurses, police officers, education professionals) living in rural areas⁹¹.

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 or Social Buildings** in 2001, currently ongoing. The programme finances construction of public or social buildings, such as cultural institutions, hospitals, schools, sport halls, etc.⁹². However, as social housing policies are being decentralised without a strategic framework, progress in terms of social building are unequal among the Romanian territory⁹³.

Between January and June 2019, Romania led the Presidency of the Council of the European Union. The socially-oriented government of the country promoted affordable housing in Europe and more specifically pushed for a stronger European Social

Fund (ESF) that has a specific objective an access to affordable housing⁹⁴.

Last, a draft Law on housing will be initiated after the approval of the National Housing Strategy.

Building regulations

In 2019, amendments to Romania's construction law (Law no. 193/2019) entered in force, establishing new rules regarding the building process and issuance of permits. The underlying objective is to reduce bureaucratic hurdles and encourage even more domestic construction⁹⁵. This is done by e.g. the digitalisation of the application for building permits process; and stricter deadlines and cooperation between the relevant authorities.

The main laws, to be followed regarding construction works include^{96, 97}:

- Law on Building Permits (50/1991; 125/1996; 453/2001), with its associated Procedural Norms
- Law on Construction Quality (10/1995)
- Housing Law (114/1996 and Ordinance 44/1998)
- Government decision on General Urban Regulation (525/1996)
- Law on Territorial Planning and Urbanism (350/2001)
- law on Protection of the National Cultural Heritage (1998)
- Government decision no. 343/2017 for the approval of the regulation regarding the reception of construction works and the corresponding installation

Other important legislations which regulate construction activities at a broader general 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 place⁹⁸.

In October 2016, both the Law on Building Permits and the Law on Territorial Planning and Urbanism were amended by Law 197/2016. Various modifications have thus been 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 cases of urgency, as opposed to the standard 30 days. Moreover, fines

for breach of the conditions stated in the construction permit have been increased substantially, up to a maximum of RON 100,000 (EUR 22,000) compared to RON 10,000 (EUR 2,200) prior to the amendment⁹⁹.

The Law on Building Permits and Law on Territorial Planning and Urbanism have further been amended in December 2016 by the Government Emergency Ordinance No. 100/2016 (“GEO 100”). These changes include stricter rules in order 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 corruption¹⁰⁰.

A draft to replace the current law 50/1991 on the permitting procedure for construction works, has been issued by the Ministry for Regional Development and Public Administration. The amendment could bring numerous advantages such as the facilitation of the procedures of the applicant or the set if a data base to record all the construction works¹⁰¹.

Insurance and liability related regulations

According to the Law on The Quality of Constructions (Law Nr. 10/1995, modified by the Law nr. 177/2015¹⁰²), 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 building¹⁰³. 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 capped¹⁰⁴.

In September 2018, the law 10/1995 and its amendment 177/2015 have been 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, or the technical expertise required to name a few¹⁰⁵.

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 works, 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 property¹⁰⁶.

If the insurance against catastrophic events is mandatory, it has to be said that, actually, 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 law¹⁰⁷.

In 2018 in Romania, less than one out of five households was insured.

Insurance costs differ according to 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 very complex, involving digging and other dangerous activities, (e.g. building an underground line) the value may be between 0.8 and 1%¹⁰⁸. The insurance cost also differs regarding the type of residential building insured. House built with solid materials will be more expensive to insure, but with a higher insured value compared to house built with cheaper materials¹⁰⁹.

7

Current status and national strategies to meet Construction 2020 objectives

TO 1 – Investment conditions and volumes



The total investment by the narrow construction sector reached EUR 5.4 billion in 2018.

Total investment by the narrow construction sub-sector¹¹⁰ increased by 84.9% between 2010 and 2018 (Figure 10) going from EUR 2.9 billion to EUR 5.4 billion. The real estate activities sub-sector experienced a similar growth of 62.4%, from EUR 5.1 billion and reaching EUR 8.4 billion in 2018.

Figure 10: Investment by the Romanian broad construction sector between 2010 and 2018 (EUR m)

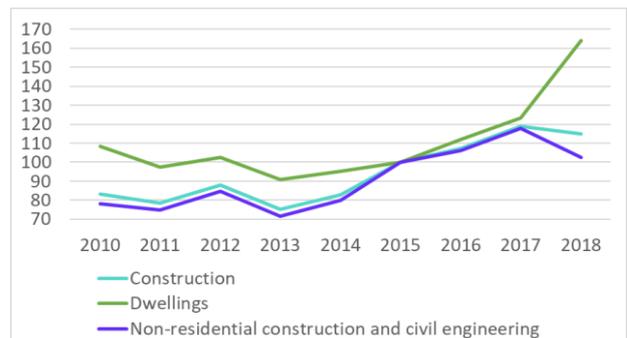


Source: Eurostat, 2019.

Total investment in construction¹¹¹ has been increasing between 2010 and 2018 (Figure 11). Despite some fluctuations, investment in non-residential construction and civil engineering increased by 31.5 percentage points between 2010 and 2018 (+2.7% between 2015 and 2018). Similarly, investment in dwellings, after a prolonged decline picked up, increasing by 64.1% between 2015 and 2018. Lastly, the narrow

construction sub-sector also experienced a strong increase in terms of investments, reaching a level 15% higher in 2018 than in 2015.

Figure 11: Investment index in the Romanian construction sector between 2010 and 2018 (2015=100)



Source: AMECO, 2019.

Total inland infrastructure investment as a share of GDP experienced a declining trend since 2010, decreasing from 2.7% to 1.7% in 2016¹¹². Over the 2010-2016 period, the country saw a continuous decrease in road infrastructure investments, with a 17% drop from EUR 2.9 billion in 2010 to EUR 2.4 billion in 2016. However, investment in rail infrastructure picked up significantly by 55.2% between 2010 and 2016, from EUR 168.9 million to EUR 262.1 million.

Household renovation spending as a share of household disposable income increased significantly between 2010 and 2018 from 1.2% to 3.7%, going from EUR 895.4 to EUR 4,543.6.



In 2018, the household renovation spending as a share of household disposable income represents 3.7% in Romania, as compared to 0.8% EU-28 average.

To offset the decline in investment, the Romanian government approved a series of measures and legislative amendments in 2015, such as the **VAT reduction** for tourism services (from 24.0% to 9.0%). This is expected to boost investments in hospitality and accommodation services construction¹¹³. Moreover, the standard VAT rate was cut from 24.0% in 2015 to 20.0% in 2016 and 19.0% in 2017, being reduced to 5.0% for properties with an area up to 120 m²¹¹⁴. In November 2018, the Romanian government went even further in its initiatives to re-boost investments. VAT was reduced at a rate of 5.0% for hotel, catering and restaurants, sports facilities and services that allow access to benches, amusement and recreational parks¹¹⁵. The country is also considering reducing the standard VAT from 19.0% to 18.0%. Initially planned to be effective in January 2019, it has been postponed¹¹⁶.

Romania has one of the least developed road networks in the EU. It also has the lowest motorway density with only 38 km per million inhabitants and the highest road fatality rate in the EU. Railway reforms are also lagging behind. Heavy underinvestment in maintenance has resulted in reduced train speed and delayed delivery time for rail freight. Also, the European rail traffic management system is not operational on the core rail network¹¹⁷.

In September 2016, the government approved the revised **General Master Plan for Transport** (*Master Planul General de Transport*). It details strategic interventions in transport infrastructure up until 2030, with a total value of EUR 43.5 billion¹¹⁸. For road transport in particular, the Plan foresees the construction of 1,219 kilometres of 11 new highways until 2030, as well as 1,907 kilometres of 19 expressways, for a total investment in the sector of about EUR 27.1 billion. Specifically, an investment of EUR 13.3 billion is devoted to highways, EUR 10.8 billion for expressways, EUR 2.5 billion for other roads and rehabilitations and EUR 0.46 billion for bypasses. Instances of main road projects include the Sibiu - Pitesti highway, as well as the Ploiesti-Buzau-Bacau-Pascani expressway. Regarding the railway sector, the Romanian national railway carrier, CFR, put up for debate in July 2018, its strategy for the development of the railway infrastructure in the country. The implementation costs of the strategy

are estimated around RON 56.0 billion (EUR 11.7 billion). Investments projects under this strategy could fall under the Master Plan of Transport¹¹⁹.

In 2017, the government presented a package of **priority infrastructure projects** to be implemented in the future multi-annual financial framework 2021-2027. The road infrastructure package includes two highways and three fast roads. This includes the South Road, a 397 km long expressway, providing a fast road connection between Bucharest, Craiova, Drobeta Turnu-Severin, Caransebes and Lugoj, with an expected cost of EUR 2.5 billion¹²⁰. The implementation of this plan, and infrastructural investments in general, will be supported through national and EU funds. Currently, the investments need to complete the infrastructure projects in Romania are estimated to be about EUR 209.0 billion, resulting in a EUR 10.0 billion difference with the EUR 199.0 billion in current investments¹²¹.

With regards to **national funds**, in 2018 the government established a Sovereign Development and Investment Fund holding, a mixture of equity in state-owned companies and cash. The Romanian State contributed EUR 2.0 billion. The aim of the fund is to make profit by developing and financing bankable and sustainable infrastructure projects and other sectors of the economy¹²².

In terms of EU funding, Romania has a total allocation of EUR 30.8 billion for the 2014-2020 programming period from European Structural and Investment Funds (ESIF), with EUR 5.9 billion specifically for network infrastructures for transport and energy¹²³. By the end of 2018, around EUR 20.8 billion has been allocated to selected projects with only EUR 7.9 billion of the total allocation actually paid to Romania¹²⁴.

The European Commission adopted the 2014-2020 Large Infrastructure Operational Programme (LIOP) for Romania in July 2015, an investment package of almost EUR 9.5 billion from the EU Regional Funds to be invested in transport, environment and energy projects¹²⁵. In December 2018, the European Commission revised the LIOP and decided to co-finance 85.0% (75.0% previously) of the value of the projects carried out by the country in the areas of multi-modal transport and trans-European transport or subway infrastructures¹²⁶.



Since 1991, the EIB Group has financed 139 projects in Romania in association with 10 local partners, involving an investment of EUR 8.9 billion¹²⁷. In 2018 alone, the EIB Group financed new investments amounting to EUR 1.3 billion in Romania¹²⁸.

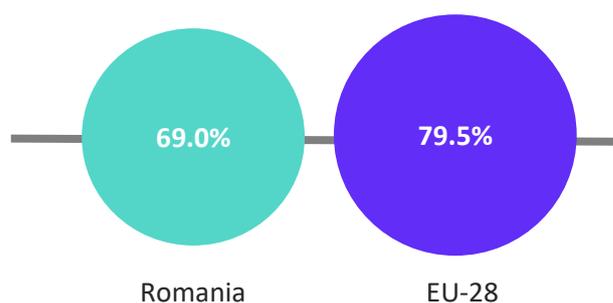
In 2018, the EIB Group invested EUR 364.2 million in infrastructure, EUR 731.1 million in SMEs financing, including EUR 110.2 million in innovation investment¹²⁹. In parallel, the total financing under the European Fund for Strategic Investments (EFSI) in Romania amounted to EUR 722.0 million in December 2019, aiming to trigger an additional investment of EUR 3.0 billion. Under the Infrastructure and Innovation Window, 16 projects have already approved, amounting to EUR 519.0 million and are set to trigger an additional EUR 1.3 billion of total investments. Under the SMEs Window, 18 agreements have been approved involving a total financing of EUR 203.0 million and are set to trigger investments of EUR 1.6 billion. It is expected to provide improved access to finance to about 26,000 SMEs and mid-cap companies¹³⁰.

However, Romania's low absorption rate of EU funds limits the effective economic impact of investments. As of Q3 2019, the absorption of EU funds under the 2014-2020 programming period stood at 31.0%, compared to the EU-28 average of 37.0%¹³¹. Efforts in this respect have been made through an agreement with the European Bank for Reconstruction and Development (EBRD), aiming to support Romania in efficiently using EU structural funds in priority areas including infrastructure¹³².

TO 2 – Skills

Participation of upper secondary students in **vocational education and training (VET)** stood at 56.2% in 2017, considerably above the EU-28 average of 47.8%. Despite this, the employment rate of VET graduates was well below the EU-28 average, standing at 69.0% in 2018 (slightly above 67.2% in 2017), compared to the EU-28 average of 79.5%¹³³.

Employment rate of VET graduates in 2018



Dual-VET education has already been rolled out since September 2017. Appropriate steps have been taken to revise the school curriculum for VET, professional qualifications and training standards. Yet, VET is still considered as a second alternative by students and parents. Lower employment rates of recent VET graduates indicate the gap between the trainings provided and the labour market's needs. Moreover, employers point out the outdated skills of VET graduates that relate to the use of outdated equipment and teaching methodology¹³⁴.

To this end, recruitment rules for VET school teachers are being overhauled. Focus is also given towards upgrading teacher competences and developing the initial and continuing training of in-company trainers. The European Social Fund (ESF) supports partnerships between businesses and VET schools and is expected to finance the VET reform¹³⁵.

Despite receiving strong interest from businesses, dual education has become relatively unattractive for students. Furthermore, the required financial investment by companies is high and it is rather difficult for them to retain students¹³⁶.

In 2017, the proportion of low-qualified adults in employment in Romania (55.6%) is in line with the EU-28 average (56.8%). Yet, Romania's adult participation in **lifelong learning** stood at 0.9% in 2018, one of the lowest in the EU-28 region (11.1%). To rectify this situation, the government is taking steps to promote adult learning. Under the national programme "Invest in yourself" Romanian government is offering financial support to access education, training and culture through a state-guaranteed loan. Moreover, the classification 'unqualified workers' has been renamed 'elementary occupations' and a list of such

occupations has been developed. Through the government ordinance 96/2018, the possibility of a six-month apprenticeship programme at European Qualification Framework (EQF) level 1 has also been introduced. The Romanian Ministry of Labour is also in the process of establishing occupational standards for EQF level 1 and an underlying appropriate training offer¹³⁷.

The construction sector used to be an attractive domain for higher education graduates in Romania, particularly prior to the crisis, when it was booming. However, in recent years, the comparatively lower entry-level salaries for educated graduates have shifted their preference towards jobs in alternative sectors, with the ICT industry being the preferred sector¹³⁸.

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. To this end, it offers a variety of courses, including stonemasonry, plastering, waterproof insulation, roofing and flooring, but also 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 sector¹³⁹.

Finally, under Horizon 2020, the project **Fit-to-nZEB** was also set up and implemented, aimed at providing innovative training schemes for retrofitting dwellings over 2017–2019. The project comprised of five goals including the elaboration of a set of learning outcomes on deep energy renovation; the development of new training schemes; the review of national educational plans; the training of trainers and the support and monitoring of pilot courses¹⁴⁰.

The project was a massive success in Romania. In association with its local partner **Cluster for Promoting Nearly Zero Energy Buildings (PronZEB)**, the project supported the high-school training and piloted the courses for construction workers. The project also provided an opportunity

for networking, attracting of new partners from Romania and abroad¹⁴¹.

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 defines 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 the implementation of energy efficiency. In addition, **Law 159/2013** transposes the provisions of Directive 2010/31/EC into national legislation, by amending Law 372/2005, regarding the energy performance of buildings (e.g. nZEB, EPCs, etc.). The Romanian government approved in January 2016 a further amendment to **Law no. 372/2005** on the energy performance of buildings. The Law stipulates the obligation of mayors in urban areas with more than 5,000 inhabitants to initiate multi-annual local plans to increase the number of new and existing buildings, whose energy consumption is nearly zero.

In line with the requirements of the Energy Efficiency Directive (2012/27/EU), the Romanian government approved the Fourth **National Energy Efficiency Action Plan (NEEAP)** for 2017-2020. The Plan sets out the estimated energy consumption and planned energy efficiency measures to meet the 2020 energy efficiency targets. The Romanian NEEAP has two objectives, namely the reduction of primary energy consumption to 43 million tonnes of oil equivalent (Mtoe) by 2020 and the reduction of final energy consumption to 30 million toe¹⁴². This represents a 19.0% reduction of energy consumption by 2020. These goals will be achieved through a series of programmes initiated by the Regulatory Authority for Energy, including the 'The Thermal Rehabilitation of Blocks of Flats Programme', the 'Heating 2006-2020 - heat and comfort' and the 'Energy efficiency improvement in households and low-income communities'. These are coordinated by the Ministry of Regional Development, Public Administration and European Funds.

Energy poverty is associated with low energy efficiency and high energy costs. In Romania, energy efficiency is of utmost importance and this explains why numerous initiatives are implemented by the country and by the European Union to answer this problem. Indeed, it is estimated that over 20% of the households in Romania face energy poverty¹⁴³.

The Thermal Rehabilitation Programme (*Programul de Reabilitarea termica a blocurilor de locuinte*)¹⁴⁴, launched in 2009 by the Ministry of Regional Development and still ongoing. It aims to increase energy efficiency of residential buildings built between 1950 and 1990 to reduce the specific annual consumption of energy for heating below 100kWh/m². Under the programme, four-fifth of the rehabilitation works costs are covered by state and local budgets, with homeowners (beneficiaries) providing the remaining amount¹⁴⁵.

The programme **Heating 2006-2020 - Warmth and comfort** (*Programul Termoficare 2006-2020 - caldura si confort*), initially introduced in 2006 and planned until 2015, was extended until 2020, with a total available budget of RON 2.12 billion (EUR 443.0 million)¹⁴⁶. The programme aims to modernise, refurbish and develop centralised heating, as well as to improve the quality and accessibility of the heat supply. Under the scheme, local administrations can benefit from a state co-financing of up to 70.0% of the value of investments¹⁴⁷.

The implementation of the **National Programme on Increasing Energy Performance in Housing Blocks** has led to the renovation of 1,744 apartments¹⁴⁸. The programme targets the refurbishment of buildings, built between 1950 and 1970, to reduce their heating consumption.

In 2017, the government approved a state aid scheme to boost investments in the energy production from less exploited renewable energy resources (such as biomass, biogas and geothermal energy). The aid amounts to EUR 100.0 million and targets municipalities and enterprises, active in electricity and thermal energy production. A non-refundable financing of up to EUR 15.0 million can be provided for up to 45% of total eligible expenses¹⁴⁹.

The newly launched **Green Economy Financing Facility** support Romanian household to in energy

and money savings. The framework is to help Romanian household to invest in energy efficiency, renewable energy and water saving solutions. The budget of the project amounts EUR 100.0 million¹⁵⁰.

By 2030, use of energy from renewable resources should amount 32% and the energy efficiency should stand at 32.5%.

In December 2018, Romania submitted its draft National Energy and Climate Plan in line with the Regulation on the Governance of the Energy Union and Climate Action. In relation to the final plan to be adopted soon, Romania will provide an overview of its investment needs until 2030 under different aspects of the Energy Union, including renewable energy, energy efficiency, climate mitigation and adaptation¹⁵¹.

Under its draft National Energy and Climate Plan, Romania has indicated a total investment need of about EUR 22.0 billion on energy and climate for the 2021-2030 period¹⁵².

Finally, in December 2018, the EU implemented new regulations on renewable energy and on energy efficiency. By 2030, the use of energy from renewable sources should amount at least 32%. Regarding energy efficiency, the new objective is now 32.5% by 2030, and all the member states should develop integrated energy and climate plans for the period 2021-2030¹⁵³.

TO 4 – Single Market

According to the EU Single Market Scoreboard 2019, Romania scored overall relatively well with respect to most of the metrics, particularly in terms of infringements, internal market information system and trade integration in the single market for good, all of which are above the EU-28 average.

In terms of infringements, Romania's average case duration has improved to 22.3 months, below the EU-28 average of 38.1 months. With regards to internal market information system, the country has improved in four out of five indicators. All of them are above the European Economic Area (EEA) average along with a subsequent increase in counterparts' satisfaction. Further, Romania's trade integration in the single market for goods

has increased slightly while its trade integration for services displayed the highest growth in the EU.

However, Romania's performance in terms of public procurement is limited. It scored poorly with respect to the single bidder (i.e. the proportion of contracts awarded with just one bidder); no calls for bids (i.e. the proportion of procurement procedures negotiated with a company without a call for tender) and cooperative procurement (i.e. proportion of procurement procedures with more than one public buyer). Data is also unsatisfactory for the aspects of award criteria (i.e. proportion of procedures awarded only on the basis of lowest price); SME contractors (i.e. number of smaller firms among the contractors); missing call for bids (i.e. proportion of awarded contracts for which a call took place), missing seller registration number (i.e. proportion of procedures where the registration number of a seller was not included) and missing buyer registration numbers (i.e. proportion of procedures where the registration number of the buyer was not included)¹⁵⁴. Nonetheless, Romania performed relatively well with regards to SME bids (i.e. proportion of bids from smaller firms) and procedures divided into lots (i.e. proportion of tenders divided into lots). Overall, these measurement criteria reflect a lack of competition and transparency, bureaucracy, barriers for smaller firms as well as insufficient information.

The most recognised obstacles to doing business in Romania include corruption as well as patronage and nepotism, as identified by 85.0% and 82.0% of businesses respectively (compared to EU-28 averages: 37.0% and 38.0% respectively)¹⁵⁵.

Indeed, public contracts in the construction sector are in some cases awarded to companies based on corrupted practices or political connections, leading to low quality construction works. According to a study carried out under the EU-funded project ANTICORRP, procurement of non-EU funded contracts is more prone to corruption, particularly at the county and local level, due to weak administrative capacity, and especially when state-owned companies participate¹⁵⁶.

A survey by the European Commission conducted in 2017 shows that more than one-third of surveyed citizens (42%) believes that "bribery and abuse of office" are widespread among officials issuing building permits¹⁵⁷.

To address the issue of corruption, dedicated anti-corruption agencies were set up, such as the **National Integrity Agency (ANI)**, aiming to enforce conflict of interest legislation¹⁵⁸. The **National Anti-corruption Directorate (DNA)** was also set up as a specialised criminal prosecution agency. In February 2014, an updated **Electronic Public Procurement System (SEAP) platform** was launched, aiming to provide electronic services to public administration institutions¹⁵⁹. In May 2016, the EU directives on procurement were transposed in the national legislation and entered into force, while all the necessary secondary legislation was adopted by the end of 2016. These included a law imposing systematic ex-ante controls on conflicts of interests¹⁶⁰.

Moreover, the **National Anti-corruption Strategy 2016-2020 (Strategia Națională Anticorupție 2016-2020 – SNA)** was adopted in August 2016 to further combat corruption and ensure integrity in the public sector¹⁶¹. Nevertheless, through emergency ordinance 13/2017, the government 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 corruption¹⁶². These criticisms – raised amongst other by the European Commission – were reiterated in early 2018, in the midst of a new proposed legislation, aiming to curb the powers of Romania's National Anti-corruption Directorate (DNA). The proposed legislation would also make it harder to prosecute corruption¹⁶³.

Between 2018 and 2019, the National Anti-Corruption Directorate has been the centre of public and media criticism from senior politicians. Two instances including the dismissal of the sitting Chief Prosecutor of the National Anti-Corruption Directorate and ignoring the negative opinion of the Superior Council of Magistracy by the proposed replacement, have further aggravated the issue¹⁶⁴.

Moreover, ongoing amendments to the Criminal Code and the Code of Criminal Procedure have upset the equilibrium between the public interest in sanctioning crime, victims' rights and the rights of suspects. Additionally, the amendments also reduce the scope of corruption as an offence as highlighted by the Venice Commission. Overall, the implementation of the national anti-corruption strategy is advancing at legislative level, but the credibility of the process is undermined by political developments¹⁶⁵.

An important role regarding the integration of the Romanian construction market in the EU and the standardisation of construction products is played by the Institute for Research of Equipment and Technologies in Construction (*Institutul de Cercetări pentru Echipamente și Tehnologii în Construcții - ICECON*). The Institute evaluates and verifies performance in the field of construction products (in conformity with EU Regulation no 305/2011)¹⁶⁶. 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 assessments¹⁶⁷.

Regarding the implementation of **Eurocodes**, Romania has made some steps forward. All Eurocode parts are published as National Standards, with National Annexes being published on all Parts, while 11 Eurocode parts are compulsory for structural design. However, there is no regulatory framework enforcing the use of the Eurocodes in public procurement¹⁶⁸.

TO 5 – International competitiveness

Romania ranks 51st out of 141 economies in the 2019 Global Competitiveness Index, an improvement of one position compared to last year's ranking¹⁶⁹.

The Romanian SBA performance shows mixed results. The country's performance in terms of the **internationalisation of its SMEs** is in line with the EU-28 average. However, there is an urgent need to improve its trade performance, in particular with regards to the involvement of trade community, extra-EU online exporters, SMEs with

extra-EU exports as well as imports of goods. In terms of border agency co-operation, Romania performs average. Nonetheless, the country is performing well in information availability, advance rulings and procedural formalities¹⁷⁰.

During 2018, the Romanian government introduced two important measures¹⁷¹. 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 internationally competitive by setting up new export business centres and by providing financial support to facilitate entrance 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, engaging in finance 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 opportunities¹⁷².

In January 2017, the Ministry for Business Environment Commerce and Entrepreneurship launched the **Programme to support the internationalisation of Romanian economic operators** (*Programul de susținere a internaționalizării operatorilor economici români*) for the period 2017-2020. The programme facilitates the promotion of products and services of Romanian SMEs in foreign markets, stimulating communication and business partnerships and preparing entrepreneurs to expand to new markets. Under the initiative, up to 500 beneficiaries a year can obtain state grants of up to RON 50,000 (EUR 10,450) for participation in international fairs, exhibitions and trade missions abroad, but also for the development of

company's visual identity and online presence¹⁷³. The Ministry supports the participation of Romanian construction companies in international events, such as the *Fensterbau Frontale* event in Nuremberg or the *Construma Budapesta* event in Budapest. The latter is the most important exhibition for the construction sector in Central and Eastern Europe¹⁷⁴.

Romania's strong export performance is mostly driven by subdued export prices and a gradual deprecation in national currency, mitigating any export price hikes¹⁷⁵.

Yet, a rise in unit labour costs has pressurised Romania's real effective exchange rate thus reducing its exports' cost competitiveness. There are also a variety of indirect cost directly affecting (negatively) Romania's competitiveness including

poor roads and railways infrastructure. These adversely affects the mobility of goods and services across borders. Romania's low innovative capabilities is another area of concern limiting its competitiveness in the international markets¹⁷⁶.

However, Hidroconstructia was granted a USD 23 million (EUR 18.6 billion) guarantee from EximBank in early 2018, allowing the Romanian company to run a USD 115.5 million contract in Jordan, as a result of winning a tender organised by the Arabian Potassium Company. Under the contract, Hidroconstructia will conduct various construction works, including waterproofing, metallic, mechanical and electrical works¹⁷⁷. In January 2019, the company had 70 ongoing contracts in the country, whereas it represents 10 execution contracts abroad (Belgium, Germany, Bulgaria and Jordan)¹⁷⁸.

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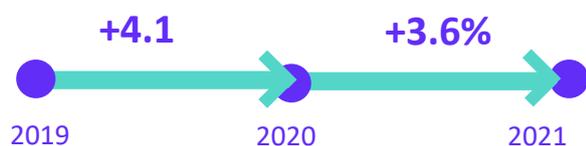
Outlook

The Romanian economy has witnessed strong growth over recent years. Its GDP is further projected to increase by 7.0% over 2019-2021.

With the on-going improvements in the macroeconomic situation, Romania's **GDP** is expected to grow by 4.1% in 2019 and 3.6% in 2020, reaching RON 896.3 billion (EUR 187.3 billion).

The broad construction sector outlook remains positive driven by rising investments in housing, non-residential and civil engineering (transport) projects, sometimes backed by EU financing. The total **turnover of the broad construction sector** is estimated to increase by 4.9% in 2019 and 5.4% in 2020, on a yearly-on-yearly basis, reaching EUR 35.2 billion.

Expected GDP growth between 2019 and 2021



The **total value added** of the broad construction sector to the economy is expected to increase by 5.4% in 2019 and 5.8% in 2020 respectively reaching EUR 11.4 billion. This will primarily be driven by increase in the value added by the real estate activities (+9.2% YoY for 2019 and 9.6% YoY for 2020) and the architectural and engineering activities sub-sectors (+8.2% YoY for 2019 and 8.5% YoY for 2020).

The **number of workers** in the broad construction sector is also expected to reach 584,008 in 2019 (+4.7% YoY) and 614,123 in 2020 (+5.2% YoY). Most of this growth is predicted to come from two sub-sectors: real estate activities (+19.6%) and architectural and engineering activities (+17.4%) over the 2019-2021 period.

Number of persons employed in the real estate activities sub-sector between 2019 and 2021

↑ 19.6%

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. Buildings renovation and thermal rehabilitation continue to remain an attractive market with further untapped potential. Almost two-thirds of the total Romanian building stock is older than 35 years and lacks efficient thermal insulation. The necessary investments to update the stock are estimated to amount to EUR 1.5 billion per year by the Ministry of Regional Development¹⁷⁹.

The **non-residential construction segment** saw a solid growth for 2019, with a pipeline of projects to build 1.2 million square meters of industrial, retail and office space. This represents a 41.2% increase compared to 2018, where 850,000 square meters were delivered¹⁸⁰. It is predicted that demand will rise for new office constructions as current and new players in the market will plan to increase their occupied space by 20-50%.

The **civil engineering segment** will further boost the construction sector growth, driven by important planned investments in public infrastructure, transport and substantial contributions from EU backed funds. Transport infrastructure is expected to be the leading segment, due to extensive investments to be undertaken as outlined in the General Transport Master Plan. Two important highways are already planned to be constructed in 2019 in Romania (Bucharest Belt and Craiova-Pitesti) for a budget of EUR 820 million. Regarding railways, 58 investments projects are currently underway for estimated

costs of EUR 2.8 billion. Another important infrastructure project, upgradation of the Constanta Port, is also planned between 2020 and 2025 at an estimated cost of EUR 872.5 million¹⁸¹.

However, labour shortages and job-skill mismatch continue to hinder the development pace of the sector. Additionally, Romania needs to continue its educational reforms and improve its VET policies to remain competitive. In this respect, an improved absorption of available EU funds will play a fundamental role in increasing the quality and quantity of public spending on infrastructure. Further, greater transparency and an enhanced

public procurement process is needed to realise the full potential of infrastructure investments.

Overall, the economic outlook for the Romanian broad construction sector is positive. Major improvements in the investment environment driven by EU financing and legislative reforms, will further act as a positive development for the sector. The current market trends suggest a moderate growth in the Romanian residential and commercial construction sector over the coming years.

References

- 1 Please note that this 2018 is a nowcast – please refer to the methodology notes for further details.
 2 Please note that this 2018 is a nowcast – please refer to the methodology notes for further details.
 3 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.
 4 Data for subsequent years unavailable.
 5 Apparent labour productivity refers to the gross value added per person employed.
 6 Please note that this 2018 is a nowcast – please refer to the methodology notes for further details.
 7 The gross operating rate is the ratio of Gross Operating Surplus to Turnover, and is an indicator of profitability.
 8 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
 9 Please note that this 2018 is a nowcast – please refer to the methodology notes for further details.
 10 Data unavailable for subsequent years.
 11 European Commission (2019). European Semester Country Report. Romania [https://ec.europa.eu/info/sites/info/files/file_import/2019-](https://ec.europa.eu/info/sites/info/files/file_import/2019-european-semester-country-report-romania_en.pdf)
[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)
 12 Doing Business 2020 Romania. <http://www.doingbusiness.org/en/data/exploreeconomies/romania>
 13 2019 SBA Fact Sheet, Romania. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
 14 World Economic Forum, The Global Competitiveness Report 2019.
http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
 15 SME Initiative Romania: Information note to the Call for Expression of Interest published on 21 October 2016, October 2018.
http://www.eif.org/what_we_do/guarantees/sme_initiative/smei_romania/information-note.htm
 16 See more information at: https://www.eif.org/what_we_do/resources/jeremie_romania_equity/index.htm
 17 Data for real estate activities sub-sector is unavailable, hence not mentioned in the description.
 18 Data for 2018 is not available.
 19 According to Eurostat, construction services comprises Construction Abroad (code 250) and Construction in the Compiling Economy (code
 20 251). They do not include architectural services, or engineering services.
 21 No data available prior to 2013.
 22 Please note that 2018 data is estimated based on data up to November.
 23 Finance constrained firms refer to firms who have been dissatisfied with the amount of finance obtained; those who did not receive it; or
 those who found borrowing costs would be too high.
 24 EIB (2018). EIB Group survey on investment and investment finance Country overview Romania.
https://www.eib.org/attachments/efs/eibis_2018_romania_en.pdf
 25 Global Property Guide – Romania. <https://www.globalpropertyguide.com/Europe/Romania>
 26 Romania residential building permits 2019. <http://www.insse.ro/cms/en/tags/press-release-construction-permits?page=1>
 27 Distribution of population by tenure status in 2018. https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=ilc_lvho02&lang=en
 28 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.
 29 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
 30 The overcrowding rate is defined as the percentage of the population living in an overcrowded household.
 31 Eurostat, Overcrowding rate. 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.
 32 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
 33 World Economic Forum, The Global Competitiveness Report 2018. [http://www3.weforum.org/docs/GCR2017-](http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf)
[2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf](http://www3.weforum.org/docs/GCR2017-2018/05FullReport/TheGlobalCompetitivenessReport2017%E2%80%932018.pdf)
 34 World Economic Forum: The Global Competitiveness Report 2019 – Romania.
http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
 35 International Monetary Fund (IMF), Romania – Selected issues. March 2015. <https://www.imf.org/external/pubs/ft/scr/2015/cr1580.pdf>
 36 Financial times, mountains and politics thwart Romania’s infrastructure plans. September 2017. [https://www.ft.com/content/9d312dce-](https://www.ft.com/content/9d312dce-632f-11e7-8814-0ac7eb84e5f1)
[632f-11e7-8814-0ac7eb84e5f1](https://www.ft.com/content/9d312dce-632f-11e7-8814-0ac7eb84e5f1)
 37 Oficiul Național al Registrului Comerțului, Societăți intrate în insolvență. <https://www.onrc.ro/index.php/en/statistics?id=252&lg=en>
 38 For more information, see https://www.onrc.ro/documente/presa/comunicat_12_01_2011/5-L85-1.pdf
 39 Oficiul Național al Registrului Comerțului, Societăți intrate în insolvență. <https://www.onrc.ro/index.php/en/statistics?id=252&lg=en>
 40 Altradius, Payment practices barometers Romania, 2019. [https://atradius.nl/rapport/publicationspayment-practices-barometer-romania-](https://atradius.nl/rapport/publicationspayment-practices-barometer-romania-2019.html#)
[2019.html#](https://atradius.nl/rapport/publicationspayment-practices-barometer-romania-2019.html#)

- 41 Altradius, Payment practices barometers Romania, 2019. <https://atradius.nl/rapport/publicationspayment-practices-barometer-romania-2019.html#>
- 42 European Commission, Survey on the access to finance of enterprises – results by country, 2019. <https://ec.europa.eu/docsroom/documents/38423>
- 43 Altradius, Payment practices barometers Romania, 2019. <https://atradius.nl/rapport/publicationspayment-practices-barometer-romania-2019.html#>
- 44 Intrum Justitia, European Payment Report 2019. <https://www.intrum.com/media/5755/intrum-epr-2019.pdf>
- 45 Ibidem.
- 46 Ibidem.
- 47 Intrum Justitia, European Payment Report 2019. <https://www.intrum.com/media/5755/intrum-epr-2019.pdf>
- 48 Emerging Europe, Bad Payers Still Causing Problems for Romanian Firms, October 2017, <https://emerging-europe.com/in-brief/bad-payers-still-causing-problems-romanian-firms/>
- 49 Ibidem.
- 50 Financial Stability Report, December 2018. <http://www.bnr.ro/Regular-publications-2504.aspx>
- 51 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.
- 52 World Bank Group, Doing Business 2020, Economy profile for Romania. https://www.doingbusiness.org/en/data/exploreeconomies/romania#DB_dwcp
- 53 Ibidem.
- 54 Additional data on subsequent years is unavailable.
- 55 Economica, Criză de angajați în construcții: e nevoie de 600.000 de muncitori, iar constructorii sunt dispuși să crească salariile, dacă statul îi ajută. September 2017. http://www.economica.net/criza-de-angajati-in-construcii-e-nevoie-de-600-000-de-muncitori-iar-constructorii-sunt-dispusi-sa-creasca-salariile-daca-statul-ii-ajuta_143147.html
- 56 Generation of waste by waste category, hazardousness and NACE Rev. 2 activity. <https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>
- 57 Ministerul Mediului și Schimbărilor Climatice, Strategia Națională de Gestionare a Deseurilor 2014-2020. November 2013. <http://www.mmediu.ro/beta/wp-content/uploads/2013/04/2013-04-23-DGDSP-SNGD.pdf>
- 58 See more information at : https://ec.europa.eu/environment/eir/pdf/report_ro_en.pdf
- 59 Ibidem.
- 60 European Commission, European Innovation Scoreboard 2019 - Romania. <https://ec.europa.eu/docsroom/documents/35908>
- 61 Ibidem.
- 62 No data for 2012 and 2013.
- 63 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
- 64 Data for 2018 is not available. Data for the real estate activities sub-sector was not available.
- 65 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.
- 66 European Commission, The 2019 EU Industrial R&D Investment Scoreboard. <https://iri.irc.ec.europa.eu/scoreboard/2019-eu-industrial-rd-investment-scoreboard>
- 67 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
- 68 European Commission, Digital Economy and Society Index (DESI) 2019 – Romania. <https://ec.europa.eu/digital-single-market/en/scoreboard/romania>
- 69 Ibidem.
- 70 Ibidem.
- 71 Ministerul Educației Naționale, Strategia națională de cercetare, dezvoltare și inovare 2014-2020. April 2014. https://www.edu.ro/sites/default/files/fi%C8%99iere/Minister/2016/strategii/strategia-cdi-2020_-_proiect-hg.pdf
- 72 ICECON, Programe Europene. <http://www.icecon.ro/#>
- 73 European Commission. 2019 SBA Fact Sheet - Romania. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 74 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
- 75 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
- 76 Romania Green Council. <http://rogbc.org/en/about/about-us>
- 77 Liability and insurance regimes in the construction sector: national schemes and guidelines to stimulate innovation and sustainability, April 2010. <http://www.elios-ec.eu/sites/default/files/pdf/EliosSpecialReporton27MemberStates.pdf>

- 78 Conso.ro, Ce este Prima Casa? <http://www.conso.ro/ghid/programul-prima-casa/ce-este-programul-prima-casa>
- 79 Observator, Prima Casa 2018 conditii locuinta, February 2018. <https://observator.tv/economic/prima-casa-2018-conditii-locuinta-241392.html>
- 80 Finance minister: First Home programme to become "more social". <http://business-review.eu/news/finance-minister-first-home-programme-to-become-more-social-196793>
- 81 Digi24, Guvernul mărește garanțiile pentru Prima Casă. February 2017. <http://www.digi24.ro/stiri/economie/consumatori/guvernul-mareste-garantiile-pentru-prima-casa-664635>
- 82 Business Review, First Home Programme to get less funding, but to continue for a few more years. February 2018. <http://www.business-review.eu/news/first-home-programme-to-get-less-funding-but-to-continue-for-a-few-more-years-158112>
- 83 National Reform Programme - Romania 2019. https://ec.europa.eu/info/sites/info/files/2019-european-semester-national-reform-programme-romania_en.pdf
- 84 Conso, Ce locuinte beneficia de TVA de 5% ? 2018. <http://www.conso.ro/ghid/locuinte-cu-tva-5>
- 85 Construction-real estate sector in Romania, Flanders Investment & Trade market survey, 2018. https://www.flandersinvestmentandtrade.com/export/sites/trade/files/market_studies/2018-Construction%20-%20real%20estate%20sector%20in%20Romania.pdf
- 86 Economica, The government cuts half the ANL subsidies for housing construction. October 2017. http://www.economica.net/guvernul-taie-la-jumatate-subventiile-anl-pentru-constructia-de-locuinte_145213.html
- 87 National Reform Programme - Romania 2019. https://ec.europa.eu/info/sites/info/files/2019-european-semester-national-reform-programme-romania_en.pdf
- 88 ANL, Locuinte pentru tineri-descrierea programului, 2015, <http://www.anl.ro/en/locuinte-pentru-tineri/>
- 89 MDRAP, Programul de constructii prin credit ipotecar. <http://www.mdrap.ro/lucrari-publice/-1763/-5440>
- 90 Agentia Nationala pentru Locuinte, 2018. <https://www.anl.ro/en/locuinte-prin-credit-ipotecar/>
- 91 Agentia Nationala pentru Locuinte, 2018. <https://www.anl.ro/en/locuinte-prin-credit-ipotecar/>
- 92 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>
- 93 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
- 94 Affordable housing and the Romanian Presidency of the EU. <http://www.housingeurope.eu/resource-1225/affordable-housing-and-the-romanian-presidency-of-the-eu>
- 95 See more information at: <https://www.wolftheiss.com/knowledge/detail/romania-updates-its-construction-laws-to-encourage-real-estate-development-and-reduce-administrative/>
- 96 Musat&Asociatii, Property and Construction. <http://www.musat.ro/wp-content/uploads/2015/04/28-Property-and-Construction.pdf>
- 97 General Construction law, Romania, 2016. <https://www.dlapiperrealworld.com/law/index.html?t=construction&s=&q=&c=RO>
- 98 Flanders Investment and Trade, The Construction Sector in Romania http://www.flandersinvestmentandtrade.com/export/sites/trade/files/market_studies/24913090911522/24913090911522_1.pdf
- 99 Maravela Asociatii, Amendments to Romanian legislation on building permits, urban planning and real estate registers. November 2016. <http://www.bizlawyer.ro/pdf/1478506585.pdf>
- 100 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>
- 101 Noerr, Romania: A new construction law on the horizo? 2018. <https://www.noerr.com/en/newsroom/News/romania-a-new-construction-law-on-the-horizon.aspx>
- 102 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-constructiilor.htm>
- 103 DLA Piper, Limitation period. <http://www.dlapiperrealworld.com/law/index.html?t=construction&s=liability&q=limitation-period&c=RO>
- 104 Practical Law, A Thomson Reuters Legal Solution, Construction and projects in Romania: overview. <http://uk.practicallaw.com/1-502-1619?source=relatedcontent#a224357>
- 105 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-riilor-i-205185.html>
- 106 DLA Piper, Insurances. <http://www.dlapiperrealworld.com/law/index.html?t=construction&s=forms-of-contract-procurement-methods&q=insurances&c=RO>
- 107 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>
- 108 1asig.ro, Cat costa asigurările de constructii in Romania? <http://www.1asig.ro/VIDEO-Cat-costa-asigurarile-de-constructii-in-Romania-articol-3,100-51408.htm>
- 109 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>
- 110 No data available for Real Estate activities.
- 111 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.).
- 112 Data for subsequent years is not available.

Country Fact Sheet Romania

- 113 Ziarul Financiar, Reducerea TVA la alimente și în turism va stimula și piața construcțiilor. May 2015. <http://www.zf.ro/companii/reducerea-tva-la-alimente-si-in-turism-va-stimula-si-piata-construcțiilor-14207432>
- 114 Patronatul Comercianților și Servisanților de Case de Marcat din România, TVA 19% începând cu 1 ianuarie 2017. December 2016. <http://www.patronatcasesedemarcata.ro/comunicate/tva-19-incepand-cu-1-ianuarie-2017/>
- 115 Romania announces new reduced VAT rates, November 2018. <https://taxinsights.ey.com/archive/archive-news/romania-announces-new-reduced-vat-rates.aspx>
- 116 Romania abandons 2019 VAT cut, Alvara VAT Live, August 2018. <https://www.avalara.com/vatlive/en/vat-news/romania-abandons-2019-vat-cut.html>
- 117 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
- 118 Romania TV, Master Planul General de Transport al României, aprobat de Guvern. Cum se va circula până în anul 2030. September 2016. http://www.romaniatv.net/master-planul-general-de-transport-al-romaniei-aprobat-de-guvern-cum-se-va-circula-pana-in-anul-2030_314425.html
- 119 National railway carrier CFR's strategy for 2018-2022 to cost EUR 12.18 bln, July 2018. <http://business-review.eu/investments/news-investments/national-railway-carrier-cfrs-strategy-for-2018-2022-to-cost-eur-12-18-bln-175555>
- 120 Ziua De Vest, Drumul Sudului, inclus în Master Planul General de Transport al României. March 2018. <http://www.ziuainvest.ro/drumul-sudului-inclus-master-planul-general-de-transport-al-romaniei/>
- 121 Global Infrastructure Project Pipeline, Romania. <https://www.github.org/countries/romania/>
- 122 Lexology, Proposed legislation on setting up the Romanian Sovereign Fund for Development and Investments. November 2017. <https://www.lexology.com/library/detail.aspx?g=10c0500b-543d-472c-8519-0c2e6140f128>
- 123 European Commission, Country Data for: Romania. <https://cohesiondata.ec.europa.eu/countries/RO>
- 124 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
- 125 European Commission, EU will invest nearly €9.5 billion in Romania for transport, environment and energy. July 2015. https://ec.europa.eu/commission/2014-2019/cretu/announcements/eu-will-invest-nearly-eu95-billion-romania-transport-environment-and-energy_en
- 126 EU helps Romania use more cohesion funds for infrastructure projects, December 2018. <https://www.romania-insider.com/eu-romania-cohesion-funds-infrastructure-projects>
- 127 Romania and the EIB. <https://www.eib.org/en/projects/regions/european-union/romania/index.htm>
- 128 Ibidem.
- 129 Ibidem.
- 130 For more information see https://ec.europa.eu/commission/strategy/priorities-2019-2024/jobs-growth-and-investment/investment-plan-europe-juncker-plan/investment-plan-results/investment-plan-romania_en
- 131 European Structural and Investment funds, EU Data and Romania overview 2018. <https://cohesiondata.ec.europa.eu/overview>
- 132 European Bank for Reconstruction and Development (EBRD), EBRD to help Romania access EU funds, advance structural reforms. February 2016. <http://www.ebrd.com/cs/Satellite?c=Content&cid=1395248848968&d=&pagename=EBRD%2FContent%2FContentLayout>
- 133 European Commission, Education and Training Monitor 2019 Romania. https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2019-romania_en.pdf
- 134 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
- 135 European Commission, Education and Training Monitor 2019 Romania. https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2019-romania_en.pdf
- 136 Ibidem.
- 137 Ibidem.
- 138 Business Review, IT and auto companies top “Most Loved Employers” study in Romania. February 2016. <http://www.business-review.eu/featured/it-and-auto-companies-top-most-loved-employers-study-in-romania-96813>
- 139 Casa de Meserii a Constructorilor, Cursuri de formare. <https://www.cmc.org.ro/index.php/cursuri-207>
- 140 European Commission, CORDIS, Innovative training schemes for retrofitting to nZEB-levels. 2018. https://cordis.europa.eu/proiect/rcn/210594_en.html
- 141 See more information at http://www.buildup.eu/sites/default/files/content/fit2nzeb_final_brochure_19-06-02-sm.pdf
- 142 ANRE, PNAEE - Planul național de acțiune în domeniul eficienței energetice - MO nr. 169 bis/11.03.2015, https://ec.europa.eu/energy/sites/ener/files/documents/article7_ro_romania.pdf
- 143 Alessio Menegazzo (Enel) - Sărăcia energetică în România: soluții pentru reducerea vulnerabilității
Citeste mai mult: adevarul.ro/economie/stiri-economice/alessio-menegazzo-enel-saracia-energetica-romania-solutii-reducerea-vulnerabilitatii-consumatorilor-1_5b39eaf7df52022f75c33e06/index.html
- 144 Please refer to the dedicated Policy Fact Sheet for further details.
- 145 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>
- 146 Ministerul Dezvoltării Regionale și Administrației Publice, Guvernul a prelungit până în 2020 programul de termoficare. July 2015. <http://www.mdrap.ro/comunicare/presa/comunicare/programul-de-termoficare-caldura-si-confort>
- 147 Gazeta de Dimineață, Fonduri guvernamentale pentru rețelele de termoficare. October 2016. <http://gazetadedimineata.ro/breaking-news/fonduri-guvernamentale-pentru-retelele-de-termoficare/>
- 148 NATIONAL REFORM PROGRAMME 2018. <https://ec.europa.eu/info/sites/info/files/2018-european-semester-national-reform-programme-romania-en.pdf>

- 149 Lexology, Romania : EUR 100 Million State Aid for the Development of Niche Renewable Sources. May 2017.
<https://www.lexology.com/library/detail.aspx?g=ec8eb750-e02b-4a96-93ba-70196319ea3e>
- 150 Fact Sheet Romania, Ibroad projects. http://ibroad-project.eu/wp-content/uploads/2018/01/iBROAD_CountryFactsheet_ROMANIA.pdf
- 151 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
- 152 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
- 153 RLWeek December 31, 2018-January 6, 2019: New EU regulations on renewable energy and energy efficiency. Amendment of Tax Code. Methodology for setting regulated rates for distribution of natural gas. <https://rlw.juridice.ro/13150/rlweek-december-31-2018-january-06-2019-new-eu-regulations-on-renewable-energy-and-energy-efficiency-amendment-of-tax-code-%EF%BB%BFmethodology-for-setting-regulated-rates-for-distribution-of-nat.html>
- 154 European Commission, EU Single Market Scoreboard. Romania.
http://ec.europa.eu/internal_market/scoreboard/performance_by_member_state/romania/index_en.htm
- 155 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
- 156 ANTICORRP, Romanian public procurement in the construction sector. Corruption risks and particularistic links. March 2015.
<http://anticorrrp.eu/wp-content/uploads/2015/06/D8.1.5-Romania.pdf>
- 157 Special Eurobarometer 470, Corruption, 2017. file:///C:/Users/alange020/Downloads/ebs_470_en.pdf
- 158 ANI, Brochure. May 2014. <https://www.integritate.eu/Home/Brosura-A.N.I.aspx>
- 159 E-licitatie, <https://www.e-licitatie.ro/Public/Common/Content.aspx?f=PublicHomePage>
- 160 European Commission, European Semester Country Report Romania. February 2017. <https://ec.europa.eu/info/sites/info/files/2017-european-semester-country-report-romania-en.pdf>
- 161 Ministerul Justitiei, Adoptarea Strategiei Naționale Anticorupție (SNA) 2016-2020. August 2016. <http://www.just.ro/adoptarea-strategiei-nationale-anticoruptie-sna-2016-2020/>
- 162 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>
- 163 EU warns Romania against planned judicial reforms. January 2018. <http://www.dw.com/en/eu-warns-romania-against-planned-judicial-reforms/a-42294820>
- 164 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
- 165 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
- 166 ICECON SA, Istoric. <http://www.icecon.ro/>
- 167 Ministerul Dezvoltarii Regionale si Administratiei Publice, Regulamentul (UE) 305/2011 - Punct de informare.
<http://www.mdrap.ro/constructii/-4218>
- 168 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>
- 169 The Global Competitiveness Report 2019. http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
- 170 European Commission. 2019 SBA Fact Sheet - Romania.
<https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
- 171 Ibidem.
- 172 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>
- 173 Guvernul Romaniei, Program de promovare a firmelor românești pe piețele externe. January 2017. <http://gov.ro/ro/guvernul/sedinte-guvern/program-de-promovare-a-firmelor-romane-ti-pe-pietele-externe>
- 174 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>
- 175 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
- 176 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
- 177 Energy Observer, Eximbank: 23 million dollars collateral for a Hidroconstructia Jordan Deal. January 2018.
<https://www.energyobserver.com/en/post/7546>
- 178 Hidroconstructia continued to decline in 2018, but it won contracts of 870 million lei. January 2019.
<https://www.zf.ro/companii/hidroconstructia-a-continuat-sa-scada-in-2018-dar-a-castigat-contracte-de-870-milioane-lei-17842368>
- 179 Property Forum, 10 predictions for the Romanian market in 2018. January 2018. <https://www.property-forum.eu/news/10-predictions-for-the-romanian-market-in-2018/1813>
- 180 Non-residential real estate developments to hit new record in Romania this year, February 2019. <https://www.romania-insider.com/index.php/non-residential-developments-romania-2019>
- 181 Infrastructure Projects in Romania Key to the Future, January 2019. <https://borgenproject.org/infrastructure-projects-in-romania-key-to-the-future/>