



European Construction Sector Observatory

Country profile **Netherlands**

October 2020



In a nutshell

In 2019, the Netherlands' GDP reached EUR 758.0 billion, exhibiting a 14.0% growth as compared to the 2010 level. This represents a 1.8% increase over the previous year (EUR 744.5 billion).


The Netherlands' GDP performed well in 2019, mainly driven by robust domestic demand and investment, which benefited from low capital cost and high profitability, despite a more challenging environment.

In parallel, the **number of enterprises** in the broad construction sector increased by 42.3%, from 191,668 in 2010 to 272,655 in 2019, with the architectural and engineering activities sub-sector registering the highest increment of 66.8%, followed by the narrow construction sub-sector (+49.0%) over the 2010-2019 period.

Number of enterprises in the broad construction sector between 2010 and 2019  **42.3%**

The **volume index of production**¹ in the broad construction sector experienced an increment of 19.5% over the period of 2015-2019.

The **total turnover** of the broad construction sector in 2017 stood at EUR 155.7 billion, a 14.1% increase compared to 2010. It further increased to EUR 172.7 billion in 2019, a 26.5% increase since 2010. This overall increase was mainly driven by turnover growth in the architectural and engineering activities (+41.9%), the narrow construction (+26.9%), the real estate activities (+25.3%), and the manufacturing (+11.3%) sub-sectors over the 2010-2019 period.

Turnover in the architectural and engineering activities sub-sector between 2010 and 2019  **41.9%**

Similarly, the **gross operating rate** of the broad construction sector, which gives an indication of the sector's profitability, stood at 18.8% in 2017, 3.0 percentage points (pps) higher than 2010 (15.8%) and above the EU-27 average of 16.6%.

In terms of employment, there were 745,699 **persons employed** in the broad construction sector in 2019, marking a 0.8% decline as compared to the 2010 level (751,562). This was mainly due to a decline experienced in the manufacturing (-14.9%), the real estate activities (-8.9%) and the narrow construction (-1.4%) sub-sectors, offsetting the rise in the architectural and engineering activities sub-sector (+16.8%), during the same reference period.

Currently, there are two main issues hindering the development of the Dutch construction sector. Firstly, the Dutch construction sector faces a shortage of skilled workers, in part due to inappropriate vocational education training (VET). This issue is becoming an obstacle for the firms' business operations, resulting in a rise in unfilled job vacancies². Despite the high tertiary attainment rate of 49.4% in 2018³, demand for high-skilled workers and medium-skilled workers is expected to grow by 2.4 million and 1.3 million respectively until 2025⁴.

Secondly, delays were experienced in infrastructure and construction projects due to the Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS) and nitrogen problems. Around 18,000 building projects in the Netherlands have been delayed due to the breach

of EU laws⁵. This related to the government's Nitrogen Repair Programme (PAS), which was judged by the Council of State to be contrary to European legislation (the Habitat and Natura 2000 Directive). Therefore the permits became null and void.

The **housing market** is expected to generate significant business opportunities for the construction sector, supported by some government measures. The Dutch government set a target for constructing 75,000 new homes per year until 2025. In addition, it has also announced a package worth EUR 1.0 billion in investment subsidies, aimed at boosting housing construction. This amount will be distributed over a period of four years, provided to the municipalities where shortages are most acute.

With regards to the **civil engineering** market, the Netherlands' long-term infrastructure and transport plan (*Meerjarenprogramma Infrastructuur, Ruimte en Transport*, MIRT) explains the investment plans for the 154 infrastructure projects currently in progress. This pipeline of projects may increase as part of the EU recovery package and the upcoming Multi-annual Financial Framework.

The COVID-19 pandemic has had limited impact on the ongoing projects in the Netherlands. Nevertheless, the worsening economic outlook is expected to weigh down on the construction sector output growth. The sector is expected to rebound, particularly in 2021, as the measures (like lockdown and social distancing) are lifted⁶.

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.....	10
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.....	15
4 Key issues and barriers in the construction sector	16
Company failure.....	16
Trade credit.....	16
Late payment.....	17
Time and cost of obtaining building permits and licenses.....	17
Skills shortage.....	17
Sector and sub-sector specific issues.....	19
5 Innovation in the construction sector	20
Innovation performance.....	20
Eco-innovation and digitalisation.....	21
6 National and regional regulatory framework	23
Policy schemes.....	23
Building regulations.....	24
Insurance and liability related regulations.....	25
7 Current status and national strategies to meet Construction 2020 objectives	26
TO 1 – Investment conditions and volumes.....	26
TO 2 – Skills.....	27
TO 3 – Resource efficiency / Sustainable construction.....	28
TO 4 – Single Market.....	29
TO 5 – International competitiveness.....	30
8 Outlook	31

1

Key figures

Construction market

The **number of enterprises** in the broad construction sector in the Netherlands totalled 272,655 in 2019⁷ (Figure1), with the narrow construction sub-sector accounting for 69.8% of the total firms. Overall, the number of enterprises in the broad construction sector increased by 42.3% between 2010 and 2019, mostly driven by the 66.8% growth in the architectural and engineering activities, followed by 49.0% in the narrow construction and 12.6% in the manufacturing sub-sectors. Conversely, the real estate activities sub-sector recorded a decline of 5.3% in the same period.

Number of enterprises
in the broad
construction sector
between 2010 and 2019

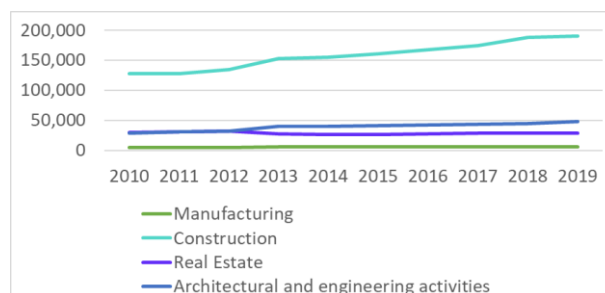
↑ 42.3%

The **volume index of production** in the broad construction sector⁸ experienced an initial 12.9 index points (ip) drop between 2010 and 2013 due to the crisis, reaching a bottom low (Figure2). However, it increased by 40.5 ip during 2013-2019, leading to an overall increment of 19.5% over the period of 2015-2019.

Volume index of
production in the broad
construction sector
between 2015 and 2019

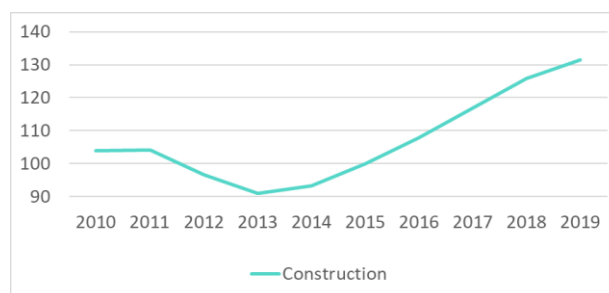
↑ 19.5%

Figure 1: Number of enterprises in the broad Dutch construction sector between 2010 and 2019



Source: Eurostat, 2020.

Figure 2: Volume index of production in the Dutch construction sector between 2010 and 2019 (2015=100)

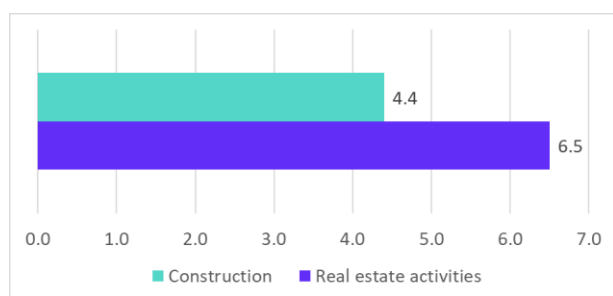


Source: Eurostat, 2020.

The total **value added at factor cost** of the broad construction sector amounted to EUR 61.2 billion in 2019⁹, with the narrow construction sub-sector contributing to 50.4% of the total¹⁰ (EUR 30.8 billion). The real estate activities sub-sector contributed to 28.1% of the total (i.e., EUR 17.2 billion), followed by the architectural and engineering activities (14.4% of the total i.e. EUR 8.8 billion) and the manufacturing (7.1% of the total i.e., EUR 4.3 billion) sub-sectors.

The **share of gross value added of the broad construction sector** stood at 12.3% in 2017¹¹, below the EU-27 average of 16.4%. In 2019, the share of narrow construction and real estate activities sub-sectors, for the same category, stood at 4.4% (EU-27 average 5.0%) and 6.5% (EU-27 average 9.7%), respectively.

Figure 3: Gross value added as a share of GDP in the Dutch broad construction sector in 2019 (%)



Source: Eurostat, 2020.

The Netherlands has twelve NUTS-2 statistical regions (provinces) namely Groningen, Friesland (NL), Drenthe, Overijssel, Gelderland, Flevoland, Utrecht, Noord-Holland, Zuid-Holland, Zeeland, Noord-Brabant, and Limburg (NL). The gross value added is not equally distributed among these regions. In 2017¹², Zuid-Holland, Noord-Brabant and Noord-Holland accounted for 54.6% and 57.8% of the total **regional gross value added** in the narrow construction and real estate activities sub-sectors, respectively.

Productivity

The Netherlands is among the most productive economies in the EU with a 29.0% higher hourly productivity rate than the EU-28 average. However, as compared to other mature industrialised economies, both labour productivity and total factor productivity growth have experienced a slowdown¹³.

Apparent labour productivity¹⁴ in the broad construction sector increased from EUR 67,297 in 2010 to EUR 81,902 in 2017, representing a growth of 21.7% during the period. This is above the EU-27 average of EUR 50,079 (Figure 4). This trend is reflected in all sub-sectors. The real estate activities sub-sector reported the highest increase of 50.7%, growing from EUR 151,800 in 2010 to EUR 228,800 in 2017, followed by the manufacturing sub-sector which increased by 25.6%, from EUR 59,062 to EUR 74,161 over the 2010-2017 period. Similarly, the narrow construction sub-sector registered growth of 5.4%, growing from EUR 72,700 in 2010 to EUR 76,700 in 2017, while the architectural and engineering activities sub-sector grew from EUR 63,200 in 2010 to EUR 65,500 in 2017 (+3.6%).

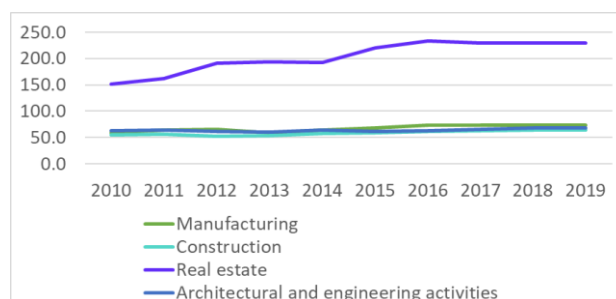
Over the 2017-2019 period, the real estate activities and manufacturing sub-sectors recorded a slight

increase of 0.2% and 0.1%, reaching EUR 229,260 and EUR 74,199, respectively. In parallel, the narrow construction and architectural and engineering activities sub-sectors reported growth of 2.0% and 3.7%, over the same period, totalling EUR 63,949 and EUR 67,898 in 2019 respectively.

Labour productivity of the real estate activities sub-sector between 2010 and 2019 **↑ 51.0%**

It is hence important to note that in the past few years, the labour productivity has rather stagnated.

Figure 4: Labour productivity in the broad construction sector in the Netherlands between 2010 and 2019 (EUR k)



Source: Eurostat, 2020.

Turnover and profitability

The **total turnover** of the broad construction sector in 2017 stood at EUR 155.7 billion, a 14.1% increase compared to 2010. In 2019, it increased to EUR 172.7 billion, representing a 26.5% increase during 2010-2019. The growth in the sector was mainly driven by the real estate activities and architectural and engineering activities sub-sectors, which registered a turnover growth of 25.0% and 16.8% respectively between 2010 and 2017. Similarly, the narrow construction and manufacturing sub-sectors recorded increases of 12.0% and 6.2% in the same period.

Over the 2017-2019 period, the architectural and engineering activities sub-sector registered the highest growth of 21.4%, ending at EUR 19.1 billion. All the other sub-sectors including the narrow construction, manufacturing and real estate activities sub-sectors increased by 13.3%, 4.8% and 0.2%, totalling EUR 109.3 billion, EUR 15.3 billion and EUR 29.0 billion, respectively over the same reference period.

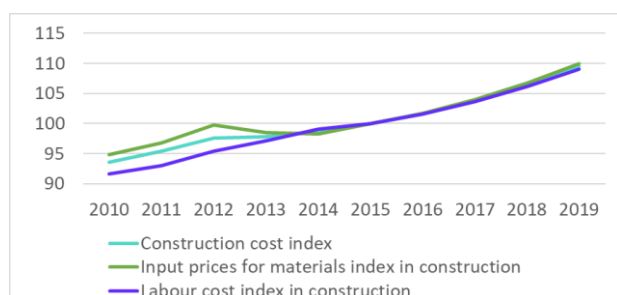
Total turnover of the broad construction sector between 2010 and 2019  **26.5%**

Similarly, the **gross operating surplus** of the broad construction sector amounted to EUR 29.3 billion in 2017, 36.0% above the 2010 level. This growth is explained by a significant increase of the gross operating surplus of real estate activities (+46.3%) and manufacturing (+44.2%) sub-sectors in the same period.

At the same time, **the gross operating rate** of the broad construction sector¹⁵, which gives an indication of the sector’s profitability, stood at 18.8% in 2017, 3.0 pps higher than 2010 (15.8%) and slightly above the EU-27 average of 16.6%. The real estate activities sub-sector enjoyed the largest profit margin on sales (47.6% in 2017), followed by the architectural and engineering activities sub-sector (15.1% in 2017). The manufacturing and narrow construction sub-sectors had the lowest gross operating rate, standing at 11.0% and 11.9% in 2017 respectively.

Construction cost has a significant influence on the profitability of the sector. Construction costs in the Netherlands have been rising over the 2015-2019 period, with the construction cost index experiencing a 9.5% increase, due to increasing material prices (+10.0%) and particularly labour costs (+9.0%).

Figure 5: Construction cost index between 2010 and 2019 (2015=100)



Source: Eurostat, 2020.

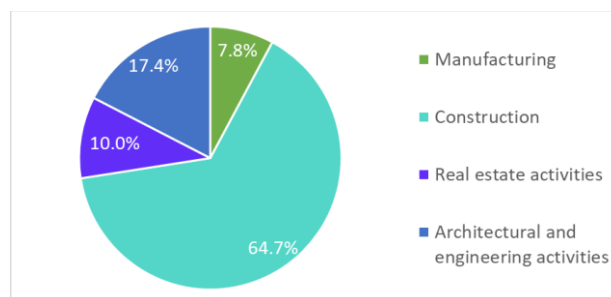
Employment

In 2019, there were 745,699 **persons employed** in the broad construction sector, marking a 0.8% decline as compared to the 2010 level (751,562). The narrow construction sub-sector employed 64.7% of the total workforce (i.e. 482,366 persons), followed by the architectural and engineering activities (17.4% i.e. 129,957 persons), real estate

activities (10.0% i.e. 74,854 persons) and manufacturing (7.8% i.e. 58,522 persons) sub-sectors. Except for the architectural and engineering activities sub-sector, which experienced an increase of 16.8% over the 2010-2019 period in terms of persons employed in the sector, all the other sub-sectors registered a decline with the largest decline being in the manufacturing sub-sector (-14.9%). This was followed by the real estate activities and narrow construction sub-sectors, which experienced declines of 8.9% and 1.4% respectively in the same period.


Number of persons employed in the architectural and engineering activities sub-sector between 2010 and 2019  **16.8%**

Figure 6: Percentage of people employed per construction sub-sectors in the Netherlands in 2019



Source: Eurostat, 2020.

As for **employment by specific occupation**, the demand for ‘Managers’ in the narrow construction, manufacturing and real estate activities sub-sectors experienced sharp declines of 48.2%, 35.6% and 35.1% respectively during 2010-2019. Conversely, the demand for ‘service and sales workers’ in the narrow construction sub-sector experienced the highest increase (+136.7%). Similarly, demand for ‘Professionals’ increased by 80.4% and 30.3% in the manufacturing and real estate activities sub-sectors respectively in the same period.

Demand for service and sales workers in the narrow construction sub-sector between 2010 and 2019  **136.7%**

There are also some regional disparities in terms of employment, whereby the Gelderland, Noord-Holland, Zuid-Holland and Noord-Brabant regions concentrated 66.8% and 68.1% of employees in the narrow construction and the real estate activities sub-sectors respectively in 2017¹⁶. The Zuid-Holland region, which accounted for the highest number of employees in the narrow construction sub-sector, i.e. 23.0%, reported a 10.1% decline over the 2010-2017 period, reaching 106,300. In the real estate activities sub-sector, Noord-Holland (accounting for the highest share of employees, i.e. 23.7%) reported a growth of 4.8% during the same period, reaching 17,400 people.

The number of **self-employed workers** in the narrow construction and real estate activities sub-sector increased by 8.7% and 11.5% respectively. Finally, SMEs employed 82.4% of the total workforce in the broad construction sector in 2017¹⁷, highlighting their importance in construction employment.

Self-employed workers in the narrow construction sub-sector represented 9.5% of all the self-employed in the general economy in 2019 - a 0.9 pps decline compared to 10.3% in 2010. This is below the EU-27 average of 11.9%.

Over the 2010-2019 period, **full-time employment** in the narrow construction sub-sector decreased by 12.0% while it increased by 4.1% in the real estate activities sub-sector. In terms of **part-time employment**, the narrow construction and real estate activities sub-sectors experienced an 8.0% and 8.9% increase respectively between 2010 and 2019.

Full-time employment
in the narrow
construction sub-sector
between 2010 and
2019



12.0%

2

Macroeconomic indicators

Economic development

In 2019, the Dutch economy reported its sixth consecutive year of expansion though at a slower rate as compared to 2018. This is mainly due to a weaker external demand, which resulted into subdued exports¹⁸.

In 2019, Dutch GDP amounted to EUR 758.0 billion, representing a 1.8% growth over the previous year and a 14.0% increase as compared to the 2010 level (EUR 664.8 billion). The growth in the GDP was primarily driven by the robust domestic demand which helped it to sustain a healthy GDP growth rate in 2019. The major contribution came from investment, which benefited from low capital cost, high profitability and overall supportive internal demand¹⁹.

The country's **potential GDP** in 2019 amounted to EUR 746.6 billion, resulting in a positive output gap of 1.5%. This positive output gap suggests that the economy is overworking its resources and running above its capacity fuelled by high demand. The **inflation rate** has been continuously declining since 2012, reaching a record low of 0.1% in 2016. It picked up again in 2017, reaching 2.7% in 2019, due to higher indirect taxes (VAT and energy taxes)²⁰.

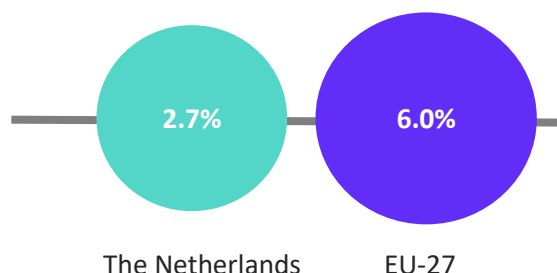
Demography and employment



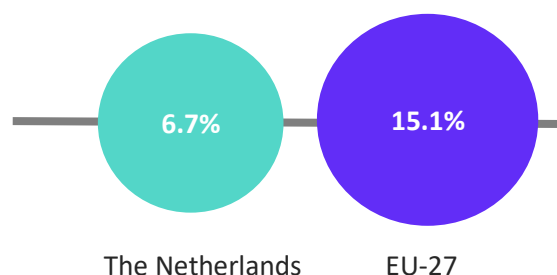
In 2019, the average unemployment rate (between 25-64 years) in the Netherlands reached 2.7%, well below the EU-27 average of 6.0%.

In 2019, the unemployment rate showed significant improvement compared to its peak of 6.4% in 2014 and its 2018 levels of 3.2%. The youth unemployment rate (below age of 25) declined to 6.7% in 2019 against 7.2% in 2018, lower than 11.1% in 2010 and more than half of the EU-27 average of 15.1%.

Unemployment rate in 2019



Youth unemployment rate in 2019



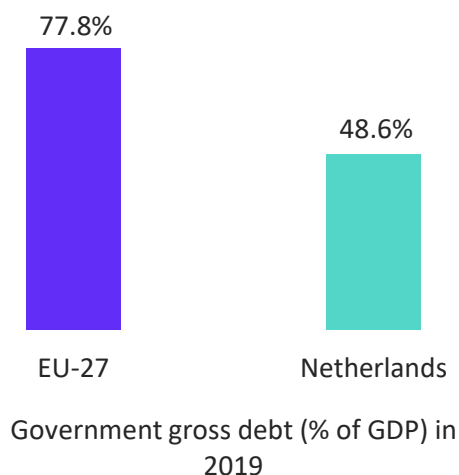
The **total population** of the Netherlands amounted to 17.3 million people in 2019. It is projected to increase by 4.0% by 2030 and 1.0% by 2050, reaching 18.1 million. In parallel, the **net migration rate** turned from negative to positive in 2008, and has increased from 32,471 in 2010 to 85,917 people in 2018²¹, with the number of immigrants reaching 194,306 (+53.3% since 2010). This is likely to constitute an additional driver for housing demand and could help support workforce capacity.

In 2019, the **working age population** made up 65.0% of the Netherlands' total population, slightly above the EU-27 average of 64.6%. By 2050, this share is expected to decrease by 6.0 pps to 58.9%. In parallel, the share of people over 65 years is expected to increase from 19.2% of all population in 2019 to 26.4% by 2050, highlighting the country's ageing population and putting further pressure on the labour supply for the construction sector (see Chapter 4 on Skills shortage). Amid high current and projected public expenditure in long-term care²²,

reforms have been implemented including decentralising care support and raising retirement age, while linking it to higher life expectancy²³.

Public finance

In 2019, **general government expenditure** represented 41.9% of GDP, the lowest since 2010 and lower than the EU-27 average of 46.7%. **General government deficit** amounted to 1.7% of GDP in 2019, below the 3.0% threshold of the EU's Stability and Growth Pact (SGP), but above the EU-27 average of -0.6%. Last, **general government gross debt** stood at 48.6% of GDP in 2019 down from 52.4% in 2018 and below the EU-27 average of 77.8%. This is the lowest level since 2010 (59.2%) and it is expected to decline further in the coming years, indicating that public finances are healthy²⁴.



Entrepreneurship and access to finance



In 2019, the Netherlands ranked 24th out of 190 countries according to the Doing Business 2020 report, in terms of starting a business. This is a slight decline compared to the previous year (22nd in 2018)²⁵.

The Netherlands has made significant progress in terms of entrepreneurship since 2008. Currently, it is one of the best performers in the EU with significantly high scores across entrepreneurship indicators, compared to other Member States, including opportunity driven entrepreneurship, entrepreneurship as a desirable career choice and

entrepreneurship education, both at basic and secondary schooling levels²⁶. The only indicator that performed worse than EU-28²⁷ average related to entrepreneurial intentions (intention to start business within three years).

Regarding access to finance, the Netherlands maintain a performance above the EU-28 average. It scores well as compared to the EU-28 average in the areas of business angel funding for new and growing firms. The Netherlands is ranked fourth in terms of access to public financial support, with 7.3% respondents believing in the deterioration of the situation (against an EU-28²⁸ average: 14.9%) in 2018. The country ranks high on access to funding measures. However, the mark-up on smaller loans remains high, with the Netherlands having the third highest cost of borrowing for small loans relative to large loans²⁹.

The Dutch government has taken several measures in order to improve access to finance for SMEs. With the launch of 'Qredits', the government has partly addressed the financing gap for microcredit. Qredits provides loans for SMEs of up to EUR 250,000, focusing on the hospitality, retail and business services sectors. In addition, it introduced 'BMKB' (*Borgstellingskrediet MKB*) which is an initiative tackling the high percentage of businesses having their loan applications rejected. Its other notable measures include:

- **SEED capital scheme**, which has been in force since 2005, received the new budget of EUR 32 million under the SME action plan in 2018. Currently, financing is available twice per year through a general and a sector-specific tender.
 - **SME-Innovation Stimulation Region and Top Sectors** (*MKBInnovatiestimulering Regio en Topsectoren*) is a subsidy scheme engaged in the financing of knowledge developing activities for SMEs active in selected sectors. Funding is provided for feasibility projects, knowledge vouchers and collaboration projects.
- Lifting the pledging prohibition** (*Afschaffing verbod op verpanding*) policy, which is applicable to all SMEs, focuses on preventing the loss of credit for SMEs, which is estimated at around EUR 1.0 billion annually³⁰.

3

Key economic drivers of the construction sector

Business confidence

In 2019, business confidence indicators, particularly consumer confidence, worsened as compared to the previous year.

The **consumer confidence** indicator deteriorated to -7.6 in 2019 from 1.8 in 2018, remaining below the 2010 level of -4.5 and the EU-27 average of -6.2. The **industry confidence** indicator reached 1.7 in 2019. While this is above the 2010 levels of -4.4 and EU-27 average (-4.8), it remains below the 2018 levels (5.5). Similarly, the **construction confidence index** declined from 33.3 in 2018 to 20.1 in 2019. This is well above the 2010 level (-28.3) and the EU-27 average of 5.1.

Moreover, the **investment ratio** has seen little fluctuation over the period 2010-2019 with its current value standing at 21.1% as compared to 18.8% in 2010. Similarly, **investment per worker** considerably increased to EUR 124,955 in 2017³¹, surpassing 2010 levels of EUR 85,469.

In 2019, confidence levels in the construction sector declined possibly due to measures related to the management of PFAS³² contamination and nitrogen pollution³³.

The outbreak of COVID-19 has adversely impacted confidence in the Dutch construction sector due to the safety measures taken by the government.

Domestic sales

The ranking of the **top five most domestically sold** construction products has remain unchanged during 2010-2018 except “Doors, windows and their frames etc.”, which was replaced by “Other structures and parts of structures etc.”. Also, out of the list of top five most sold construction products,

the top three products have not changed since 2016. The top five most domestically sold construction products are presented in Table 1, including a comparison with the most sold in the EU-27. These represented 63.2% of total domestic construction product sales in 2018.

Table 1: Top five most domestically sold construction products in the Netherlands and in the EU 2018³⁴

The Netherlands				EU-27
	Product	Value (EUR m)	Share in construction product domestic sales (%)	Product
1	Prefabricated buildings of metal (group 251110)	1,237.0	17.5	Other structures and parts, etc. (group 251123)
2	Other structures and parts, etc. (group 251123)	1,034.6	14.6	Doors, windows, etc. (group 251210)
3	Prefabricated structural components for building or civil engineering (group 236112)	913.3	12.9	Ready-mixed concrete (group 236310)
4	Tiles, flagstones, bricks, etc. (group 236111)	666.9	9.4	Prefabricated buildings of metal (group 251110)
5	Windows, French windows, etc. (group 162311)	627.2	8.9	Prefabricated structural components for building or civil engineering (group 236112)

Source: PRODCOM, 2020.

Export of construction-related products and services

The Netherlands is a major exporter of "Other structures and parts of structures" and "Doors, windows, etc.". The ranking of the most exported products has remained stable during 2010-2018, with the exceptions of "Towers and lattice masts of iron or steel" and "Other worked ornamental or building stone etc.", which were replaced by "Other structures and parts of structures etc." and "Wooden frames for paintings" respectively. The **top five most exported** construction products from the Netherlands and the EU-27 are summarised in Table 2. Together, these made up 56.5% of all construction products exports in 2018.

Table 2: Top five most exported construction products in the Netherlands and in the EU in 2018³⁵

The Netherlands				EU-27
	Product	Value (EUR m)	Share in construction product export sales (%)	Product
1	Other structures and parts, etc. (group 251123)	925.6	23.7	Ceramic tiles and flags (group 233110)
2	Doors, windows, etc. (group 251210)	465.0	11.9	Other structures and parts, etc. (group 251123)
3	Prefabricated buildings of metal (group 251110)	464.1	11.9	Fibreboard of wood, etc. (group 162115)
4	Wooden frames for paintings, etc. (group 162914)	177.3	4.5	Doors, windows and their frames etc. (group 251210)
5	Pallets, box pallets etc. (group 162411)	171.4	4.4	Marble, travertine, alabaster etc. (group 237011)

Source: PRODCOM, 2020.

In terms of **cross-border provision of construction services**³⁶, the Netherlands exported EUR 3.1 billion worldwide in 2018³⁷, showing a 13.2% increase from 2014³⁸. The export of construction services within EU-27 stood at EUR 1.6 billion in 2018. In

parallel, imports from the world reached EUR 2.8 billion including EUR 1.4 billion from the EU-27 in 2018. Thus, the Netherlands achieved a **trade surplus** of cross-border provision of construction services of EUR 317.3 million in 2018. Importantly, the EU Single Market remains the main destination of the Dutch construction services' export with a 48.1% share in 2018.

Access to finance in the construction sector

According to the Survey on the Access to Finance of Enterprises (SAFE) results 2019, access to finance continues to be the biggest concern for 8.0% of the country's SMEs, above the EU-28³⁹ average of 7.0%⁴⁰.

As per the report, bank loans are still the main source of financing for 44.0% of SMEs in the Netherlands, slightly below the EU-28 average of 45.0%. Between April and September 2019, 14.0% Dutch SMEs applied for a bank loan, while 7.0% did not apply due to fear of rejection. In addition, out of those who applied for a bank loan, 18.0% saw their applications rejected, which is more than double the EU-28 average of 7.0%⁴¹.

Access to finance remains an obstacle due, on the one hand, to the high dependence of the construction sector on bank financing, and on the other hand, by the reluctance of the latter to provide credit (partly influenced by a risk-averse type of behaviour). However, with the situation in the construction sector improving⁴², banks may exhibit a different behaviour towards providing finance to the sector.

According to EIB Investment Survey (EIBIS) 2019 report, 17.0% of Dutch SMEs in the construction sector cited 'availability of finance' as a long-term barrier to investment⁴³.

As per the Survey, the highest levels of dissatisfaction among Dutch firms in the construction sector are with the collateral requirements (15.0%), followed by the cost of finance (11.0%) and maturity terms (11.0%)⁴⁴.

In addition, Dutch companies also face a relatively high rejection rate for their credit applications. Firms taking out smaller loans also have to pay more mark-ups on average, as compared to other countries. This is primarily due to the high market

concentration in the banking sector in Netherlands and the absence of a national credit register. Nevertheless, many alternative sources of financing and providers have emerged in the country in the recent years. The Dutch authorities are also planning to create new instruments and expand those already in existence to improve access to finance for SMEs⁴⁵.

In order to address companies' liquidity shortages arising from the COVID-19 pandemic, the Dutch government introduced a loan guarantee scheme in April 2020. The scheme covers loans granted by banks as of 24 March 2020⁴⁶.

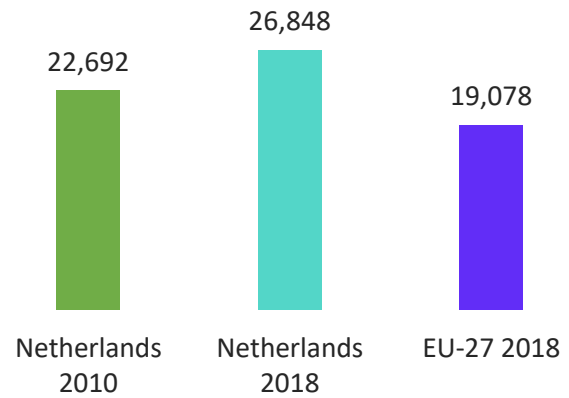
As per the scheme, the Dutch State will guarantee 90.0% of new loans to SMEs and 80.0% of new loans to large enterprises. Banks are responsible to provide a six-month moratorium on loan repayments to borrowers before they can invoke the State guarantees on loans provided under the scheme⁴⁷.

Access to housing

The **number of households** in the Netherlands has continuously increased since 2010, reaching 7.9 million in 2019. This represents an 8.0% increase as compared to the 2010 level of 7.3 million. At the same time, the share of **total population living in cities and greater cities** increased from 39.4% in 2010 to 53.2% in 2016⁴⁸. The ongoing growth in the number of households is one of the main drivers for the sustained demand for housing in the Netherlands⁴⁹.

It is expected that the rise in immigration and increase in domestic and international student numbers will also add 800,000 new households by 2040. Also, cities with a population of more than 100,000 are projected to absorb almost 75.0% of that total households⁵⁰.

In parallel, the **mean equivalised net income** reached EUR 26,848 in 2018, above the 2010 level (EUR 22,692) and the EU-27 average of EUR 19,078. This represents an 18.3% rise during the period.



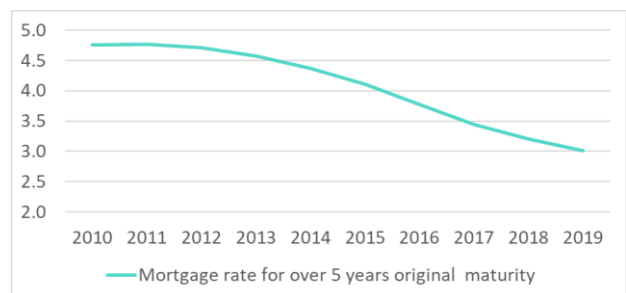
Mean equivalised net income in EUR

Moreover, lending to households for home purchases picked up, with **total outstanding residential loans** growing by 8.9%, from EUR 655.7 billion in 2010 to EUR 714.4 billion in 2018. This increase in residential loans is partly supported by the declining rates on mortgages. In fact, **interest rates on mortgages (for over five years maturity)** declined from 4.8% in 2010 to 3.0% in 2019 (Figure 7).

As compared to the other large euro-dominated mortgage markets, the mortgage rate is comparatively high in the Netherlands. This is mainly due to the relatively high loan-to-value of Dutch mortgages, the free option to prepay 10.0% of the mortgage per year and long maturity of Dutch mortgages⁵¹.

In order to protect financial stability, the Dutch government has taken measures to reduce the incentive to take on high mortgage debts. From January 01, 2019 the maximum rate of mortgage interest deductibility was reduced by 0.5 pps. From this year, 3 pps per annum will be deducted in four steps. As a result, the final target of a maximum deductible rate of around 37.0% will be achieved by 2023⁵².

Figure 7: Mortgage rates for loans for over 5 years original maturity (%) between 2010 and 2019

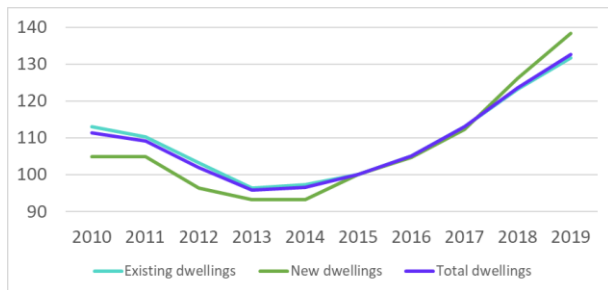


Source: ECB MFI Interest Rate Statistics, 2020.

Consequently, house prices are rising in the Netherlands due to a growing demand fuelled by lower mortgage interest rates and rising income – as well as the persisting housing shortage (more details below). In fact, the **house price index** for total dwellings increased by 32.6% over the 2015-2019 period, mostly driven by a 38.4% and 31.7% increase in new dwellings and existing dwellings over the same reference period, respectively (Figure 8).

House price index for existing dwellings between 2015 and 2019  **31.7%**

Figure 8: House price index in the Netherlands between 2010 and 2019 (2015=100)



Source: Eurostat, 2020.

The Netherlands faces housing shortages, particularly in major cities such as Amsterdam, Utrecht, The Hague, Rotterdam and Groningen. After the financial crisis, the country experienced a prolonged period of weak residential construction. This has led to a significant housing shortage in the Netherlands.

According to some estimates, the Netherlands currently has a shortage of 331,000 homes, representing 4.2% of the housing stock. The government’s target is to reduce it to 2.0% by 2035⁵³.

In 2019, there were around 71,000 dwelling completions in the country, according to Statistics Netherlands. This is 6.0% above the 2018 levels, and the highest level in a decade⁵⁴.

In order to address the current housing shortage in the country, the Dutch government has set a target for constructing 75,000 new homes per year until 2025⁵⁵.

Driven by a gradual output in the construction sector, this target was just (almost) met in 2018 and 2019. However, decline in the business permits in

2019 indicates that it is unlikely for the country to achieve this target in the coming years. Moreover, the target of constructing 75,000 new homes per year also understates the actual building requirements going forward, so even if it is met shortages may persist. According to a 2019 report, it is estimated that there will be a requirement of another 20,000 to 40,000 homes beyond the 75,000 target to achieve the government’s initial objectives⁵⁶.

At the same time, the **building permits index** for dwellings grew by 4.7% between 2015 and 2019. Similarly, for one dwelling buildings, the building permits index rose by 17.9%, while it declined by 10.8% in case of two and more dwellings in the same period.

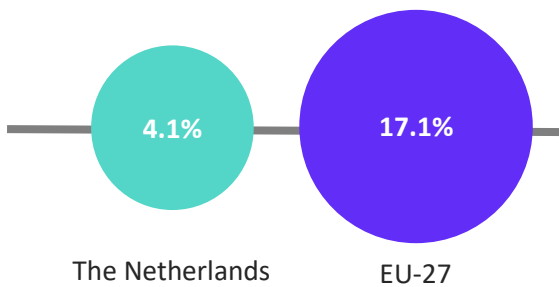
Building permit index for two and more dwellings between 2015 and 2019  **10.8%**

This decline is partly explained by the ‘nitrogen problems’ (*stikstofproblematiek*). Due to this issue, housing corporations are building less, and many projects are also getting postponed⁵⁷. In fact, the ‘nitrogen problems’ create additional near-term risks to new housing construction. According to the judgment of the Council of State in June 2019, construction projects that lead to the high nitrate deposition near the 118 *Natura 2000* nature protection areas across the Netherlands are currently not permitted without compensatory measures. In turn, this is expected to reduce housing completions by about 36,000 dwellings during 2020-2024, in the absence of any policy steps. Nevertheless, the Dutch government has introduced several measures to minimise the impact on new construction, but it still remains a significant source of uncertainty⁵⁸.

In terms of the **home ownership rate**, 73.9% of the population earning above 60.0% of median equivalised income owned their dwelling in 2018 as compared to 70.5% in 2010. This is slightly above the EU-27 average of 74.0%. In contrast, the population earning below 60% of median equivalised income shows a decline in ownership. It declined from 39.1% in 2010 to 35.6% in 2018, below the EU-27 average of 49.8%.

Moreover, the **housing cost overburden rate**⁵⁹ was at 9.4% in 2018⁶⁰, slightly below the EU-27 average of 9.6%⁶¹. It further increased to 10.0% in 2019. Likewise, the **overcrowding rate**⁶² was at 4.1% in 2018, well below the EU-27 average of 17.1%⁶³. In 2019, it slightly increased to 4.6%. Conversely, the **severe housing deprivation rate**⁶⁴ corresponded to 1.3% in 2018, one of the lowest in the EU region, well below the EU-27 average of 4.3%. Nevertheless, the rate slightly increased to 1.4% in 2019, the highest since 2010 after attaining the same level in 2016.

Overcrowding rate in 2018



Infrastructure



According to the World Economic Forum Global Competitiveness Index 2019, the Netherlands ranks 2nd out of 141 economies in terms of its overall infrastructure quality⁶⁵.

According to the report, the country performs best in Europe in terms of quality of road infrastructure

(2nd worldwide) after Singapore, followed by Efficiency of seaport services (2nd worldwide), and Efficiency of air transport services (3rd worldwide). In terms of 'Efficiency of train services' and 'Railroad density', the Netherlands is ranked 6th and 8th respectively.

Currently, the Netherlands invests heavily in its transport infrastructure network. Between 2018 and 2020, the Dutch government increased its investment on infrastructure by about EUR 2.0 billion (equivalent to almost 0.25% of GDP) per year. The country's long-term infrastructure and transport plan (*Meerjarenprogramma Infrastructuur, Ruimte en Transport*, MIRT) explains the investment plans for the 154 infrastructure projects which are currently in progress. The government is also working on converting the national infrastructure fund into a mobility fund, with a more integrated investment approach across different modes of transport including roads, waterways, public transport and rail⁶⁶.

Furthermore, the Dutch government has made some developments on addressing transport bottlenecks, such as the increasing traffic on road, rail, water and in the air. However, there still remains room for further improvement⁶⁷.

4

Key issues and barriers in the construction sector

Company failure

The number of **company births** in the narrow construction sub-sector increased by 22.6%, from 12,284 in 2010 to 15,054 in 2017⁶⁸. Conversely, number of **company deaths** decreased to 7,329 in 2017⁶⁹ from 10,977 in 2010, representing a decline of 33.2% during the period. The enterprise death rate in the narrow construction sub-sector has been dropping continuously since 2012, standing at 4.4% in 2017, well below the 2010 level of 11.0%. At the same time, the real estate activities sub-sector experienced a 12.1% increase in company births (from 1,962 in 2010 to 2,200 in 2017) and 34.1% reduction in deaths (from 2,191 to 1,444). Similarly, company births in architectural and engineering activities sub-sector declined by 18.5%, whereas company deaths increased by 6.0% from 1,921 to 2,037 between 2010 and 2017.

Company births in the narrow construction sub-sector between 2010 and 2017

↑ 22.6%

Company deaths in the narrow construction sub-sector between 2010 and 2017

↓ 33.2%

At the same time, the number of insolvent companies (excluding one-man businesses) under the construction sector decreased slightly from 306 in 2018 to 291 in 2019, according to the Market Monitor Construction 2020 report (published by Atradius)⁷⁰.

Trade credit

According to the Payment Practices Barometer 2019 survey report, 59.5% of total B2B sales were made on credit by Dutch businesses in 2019, as compared to 38.6% in the previous year. This is mainly driven by both resilient internal demand and their need to support export sales⁷¹. This also shows that the Netherlands is fairly open to granting trade credit to B2B customers. As per the survey, before making any trade credit decision, around 28.0% of Dutch SMEs perform an assessment of the creditworthiness of prospective buyers. This is below the Western European average of 35.0%⁷².

According to the SAFE results 2019, trade credit constituted a relevant source of financing for 27.3% of SMEs in 2019, above the EU-28⁷³ average of 31.0%⁷⁴.

As per the Survey, 15.3% of Dutch SMEs used trade credit in the last six months (between April and September 2019), as compared to the EU-28 average of 16.7%. However, 11.6% of SMEs have not used it recently, below the EU-28 average of 14.0%⁷⁵.

Moreover, there is no indication of increased needs to use trade credit with over 70.4% of respondent SMEs reporting their credit requirements remain unchanged over the last six months. This is below the EU-28 average of 72.9%. In terms of availability, 16.2% of respondents consider that trade credit availability improved in 2019 (compared to EU-28 average of 15.2%), while 73.5% of respondents consider the availability to have remained unchanged (compared to EU-28 average of 70.7%) and most likely to stay the same in the near future⁷⁶.

Late payment

For the Netherlands, 69.2% of payment is received on time, compared to the EU-28⁷⁷ average of 44.3%. While this is a solid performance, it is 4.6 pps less than in 2018⁷⁸. Likewise, the percentage of Dutch firms paying over 90 days late stood at 0.6% on average in 2019, well below the EU-28 average of 3.9%, but above the 2018 levels of 0.3%. Hence, payment performance appears to be slightly deteriorating.

Furthermore, 36.0% of respondents in the Netherlands ranked 'Risk of a pan-European recession' as a main challenge of their customers paying on time and in full over the next 12 months, according to European Payment Report 2020⁷⁹. At the same time, only 11.0% of respondents agreed that late payments have an adverse impact on their liquidity, well below the EU average of 45.0%. Last, 32.0% of Dutch SMEs prefer the introduction of new legislations to solve the problem of late payments, below the EU average of 50.0%⁸⁰.



In 2019, 66.5% of firms in the construction sector made their payment by the due date, while only 0.6% firms took more than 90 days, according to CRIBIS D&B Payment Study⁸¹.

In March 2013, the EU Directive 2011/7/EU, which establishes that payments in the EU should be made within 60 days, was transposed into Dutch law through a new Act limiting the provisions of the Dutch Civil Code on the contractual payment deadline. According to the Act, interest for late payment must be calculated on the basis of the European Central Bank's reference rate⁸².

Time and cost of obtaining building permits and licenses



According to the World Bank Doing Business 2020 report, the Netherlands ranked 88th in 2019 with respect to "Dealing with construction permits", worse than the previous year (84th in 2018)⁸³.

As per the report, only four procedures are required to register a firm, below the OECD high income

average of 4.9, taking 3.5 days to complete (well below the average of 9.2 days). Furthermore, 13 procedures are required to complete the formalities to build a warehouse⁸⁴, close to the OECD high-income average (12.7), taking 161 days, above the OECD high-income average (152.3) (Table 3). Moreover, the cost of completing the formalities to build a warehouse represents 3.6% of the value of the warehouse, above the OECD high-income average of 1.5%.

Table 3: Construction procedures timing and costs in the Netherlands

Procedure	Time to complete	Associated costs
Obtain report on the soil conditions from soil researching company	30 days	EUR 9,650
Hold a consultation with the municipal authorities	15 days	no charge
Submit a request for a building permit to the Municipal Executive (Mayor and Aldermen)	98 days	EUR 72,358
Notify Municipality if there is a heating installation	0.5 days	no charge
Notify building inspector two days before construction work begins	0.5 days	no charge
Request and receive inspection at foundation stage	1 day	no charge
Request and receive inspection at roof stage	1 day	no charge
Notify building inspector upon completion of work	0.5 days	no charge
Notify Fire Department upon completion of work	0.5 days	no charge
Receive final inspection	1 day	no charge
Request water and sewage connection	6 days	no charge
Receive inspection for water and sewage connection	1 day	no charge
Obtain water and sewage connection	21 days	EUR 370

Source: Doing Business overview for the Netherlands, World Bank, 2020.

Skills shortage

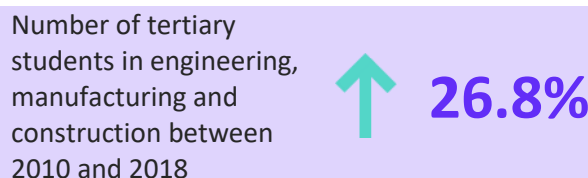
The number of **job vacancies** in the narrow construction sub-sector experienced a significant increase of 215.3%, growing from 5,763 in 2010 to 18,170 in 2019. Similarly, the number of job vacancies in real estate activities sub-sector increased from 1,075 in 2010 to 2,213 in 2019,

witnessing an increase of 105.8% over the same period. While employment prospects in the construction sector are promising, it is important to note that a very large share of the vacancies may remain unfilled due to skill shortages and lack of appropriate training.



In Netherlands, overall **adult participation in learning** is high, standing at 19.1% in 2018⁸⁵, considerably higher than the EU-28 average of 11.1%. However, the participation of low-skilled workers in adult learning is limited, standing at 9.9%. This highlights an increasing risk of their professional skills becoming outdated⁸⁶.

In parallel, **adult participation in education and training** in the narrow construction sub-sector slightly increased from 17.9% in 2010 to 18.3% in 2019. Similarly, in the real estate activities sub-sector, this rate increased slightly from 26.4% to 26.5% over the same period. Moreover, the number of tertiary students in engineering, manufacturing and construction increased by 26.8% between 2010 and 2018⁸⁷, from 10,382 to 13,163.



Despite the high tertiary attainment rate of 49.4% in 2018⁸⁸, demand for high-skilled workers and medium-skilled workers is expected to grow by 2.4 million and 1.3 million respectively until 2025. However, supply is projected to grow by only 1.0 million for high-skilled workers and to reduce for medium-skilled workers over the same period⁸⁹.

The Dutch construction sector faces a shortage of skilled workers, in part due to inappropriate vocational education training (VET). According to the Building and Infrastructure Contractor Federation (AFNL) and the Dutch Business Association of Finishing Companies (*Nederlandse Ondernemersvereniging voor Afbouwbedrijven – NOA*), VET is too general and theoretical, as opposed to being more practical and hands-on,

lacking the connection to specific jobs. This fact is reinforcing the issue of skill shortages, which is particularly evident for professions such as bricklayers, carpenters, installation controllers, roofers and plasterers as a consequence of the crisis.

Several steps have been taken by the government to further improve the quality of VET provisions. Under the 2018 quality agreement, in consultation with its regional partners, each vocational secondary school can frame its own strategies and priorities for 2019-2022. A budget of EUR 400.0 million has been allocated for the implementation of quality agreements including performance-based incentives to the tune of 25.0% of total allocated amount.

In January 2020, the Dutch government introduced a new inter-ministerial basic skills programme for the period 2020-2024 with a budget of EUR 25.0 million⁹⁰.

The programme is aimed at developing basic skills, improving quality assurance in adult basic skills education and training and strengthening the role of local and regional governments.

In March 2019, the government announced a budget increase of EUR 35.0 million for the programme ‘Tel mee met taal’ for the period 2020-2024. The programme, with a total budget of EUR 425.0 million, aims to promote digital skills to illiterate Dutch native speakers. Implemented by *UWV/ Leerwerkloketten*, the Language Accord for Employers further aims to support employers by improving employee’s basic skills and making basic skills a part of their Human Resource (HR) policy. Until now, almost 250 employers have already joined the Language Agreement with 10,000 workers following the language course⁹¹.

In addition, according to FNV Bouwen & Wonen, some inherent characteristics of the construction sector makes the skill gap more important: i) multiple layers of sub-contracting at construction sites; a high percentage of self-employed workers, and an average of 50.000 EU labour migrants working on the Dutch construction sector often on temporary contracts for a great variety of temporary work agencies. These factors hinder the sustainable skills development of the construction sector.

Last, according to FNV Bouwen & Wonen, an important part of the construction workforce will be retired in the next 10 years. This may possibly translate in practice by an increased skills and knowledge gap.

Sector and sub-sector specific issues

Material efficiency and waste management

In the Netherlands, mineral waste from construction and demolition activities decreased by 5.6%, from 21.8 million tonnes in 2010 to 20.5 million tonnes in 2016⁹². This is well below the EU-27 average of 277.7 million tonnes in 2016⁹³.

Furthermore, the Dutch construction sector generated the highest volume of waste and consumed more than half of all recycled materials in 2016^{94,95}. In this regard, the government has set an ambitious target of reducing the use of its primary resources by 50% by 2030 and becoming a complete circular economy by 2050⁹⁶.


In July 2018, the Netherlands became a member of the Platform for Accelerating the Circular Economy (PACE). This membership should further help the country in learning from the experiences of other developed economies to better transition itself into a waste less economy⁹⁷.

The main legislation encompassing all national environmental legislation is the Environmental Management Act (*Wet Milieubeheer – Wm*), which explains an integrated approach to environmental management in the Netherlands and defines the roles of the national, regional, and municipal government⁹⁸. Specifically, waste is addressed under Chapter 10 of the Wm. Moreover, waste policy is explained under the second National Waste Plan (LAP-2), which includes waste management plans for each sector as well as targets. For CDW, the target is to maintain the 95.0% recovery rate until 2021⁹⁹.

Climate and energy

Emissions of greenhouse gases (carbon monoxide and dioxide, methane and nitrous oxides) from activities related to the narrow construction subsector and real estate activities in the Netherlands amounted to a total of 3,502,261 tonnes and 312,654 tonnes in 2018, respectively. Emissions in the narrow construction sub-sector decreased by only 1.1%, while the real estate activities sub-sector experienced a 36.6% drop during the period 2010-2018, demonstrating that emissions have been decreasing compared to 1990s levels.

Greenhouse gas emissions in the real estate activities sub-sector between 2010 and 2018



36.6%

In 2019, the Dutch government adopted a National Climate Agreement (*Klimaatakkoord*) and Climate Act (*Klimaatwet*) aiming for emission reductions that exceed EU goals. The Climate Act develops a governance framework for reducing domestic greenhouse gas (GHG) emissions by 95.0% by 2050 (EU goals: 80-95% by 2050). Its intermediate reduction target is 49.0% by 2030, which is above the EU goals of 30.0%¹⁰⁰. The climate agreement also relies upon the construction sector and particularly the energy efficient renovation of public and private buildings to achieve their objectives. Additional funds will be made available to implement measures from the Climate Agreement. These funds will be spent on a fund to insulate housing, an emergency fund, agriculture, reducing nitrogen emissions, bicycle parking facilities, electric transportation and municipalities. These budgetary resources are added on top of the Climate budget that was provided as part of the Coalition Agreement¹⁰¹.

5

Innovation in the construction sector

Innovation performance



According to the European Innovation Scoreboard 2020, the Netherlands is classified as an Innovation Leader¹⁰².

According to the report, its main strengths lie in Attractive research systems, Innovation-friendly environment and Linkages. It scores particularly well on foreign doctorate students, public-private co-publications, international scientific co-publications and lifelong learning. On the other hand, firm investments, sales impacts and intellectual assets represent the country's weakest innovation dimensions. It also scores low on non-R&D innovation expenditures, sales of new-to-market and new-to-firm product innovations, medium and high-tech product exports, and SMEs with marketing organisational innovations¹⁰³.

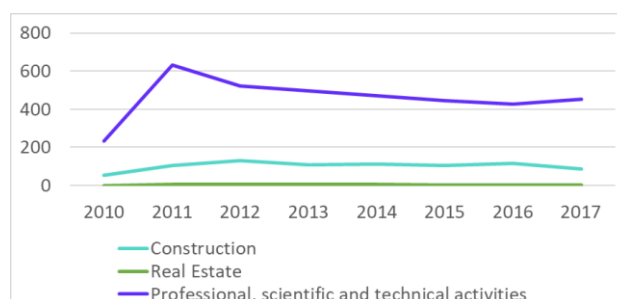
The Netherlands' strong performance in innovation is also reflected in the construction sector, where **business enterprise R&D expenditure (BERD)** in the construction sector is above the 2010 level (Figure 9). In 2017¹⁰⁴, BERD in the narrow construction sub-sector grew by 57.4% over 2010, reaching EUR 85.0 million. However, this marks a 25.4% decline as compared to the previous year. Similarly, BERD in the professional, scientific and technical activities sub-sector increased to EUR 454.0 million in 2017¹⁰⁵, registering a strong increase of 95.7% over the 2010 level. In the case of the real estate activities sub-sector, it reached EUR 2.0 million in 2017 (2010: nil), well below the 2011 peak of EUR 6.8 million.

BERD in the narrow construction sub-sector during 2010-2017

↑ 57.4%

Regarding achieving the national target of 2.5% of its GDP in R&D spending under the Europe 2020 Strategy, the Netherlands with 2.2% is close to achieving its target. However, this remains below other top innovative EU economies¹⁰⁶.

Figure 9: Business enterprise R&D expenditure (BERD) per construction sub-sector in the Netherlands between 2010 and 2017¹⁰⁷ (EUR m)



Source: Eurostat, 2020.

In parallel, **total R&D personnel** (full-time equivalents¹⁰⁸ – FTE) in the narrow construction sub-sector substantially increased by 114.8% from 492 in 2010 to 1,057 in 2017¹⁰⁹, albeit representing a 19.1% year-over-year (YoY) drop over 2016. Similarly, the FTE in the real estate activities sub-sector grew from 0 in 2010 to 26 in 2017¹¹⁰, though experiencing a 3.7% YoY drop over 2016. As for the professional, scientific and technical activities sub-sector, it reported the highest R&D personnel growth (131.1%), going from 3,003 in 2010 to 6,939 in 2017. This included an increase of 5.7% YoY compared to 2016.

In addition, the number of annual constructions related patent applications stood at 134 in 2019, which is above the 2010 level of 98 patents (+36.7%). However, only one Dutch Construction and Materials firm ranks within the top 1,000 EU companies by R&D, according to the 2019 EU Industrial R&D Investment Scoreboard¹¹¹.

Eco-innovation and digitalisation

According to the EU Eco-Innovation Index 2018, the Netherlands stood at the 15th position with a score of 92, below the EU-28¹¹² average score of 100¹¹³.

Except on resource efficiency outcomes, the Netherlands scored below the EU-28 average on four out of five indicators including eco-innovation inputs, activities, outputs and socio-economic outcomes¹¹⁴.

According to the European Commission Digital Economy and Society Index (DESI) 2020, the Netherlands ranks 4th, with a 67.7 score, out of the EU-28¹¹⁵ countries (average score: 52.5). As compared to the previous year, the Netherlands increased its score in human capital, use of internet services, integration of digital technology and digital public services. It also performs well in terms of connectivity¹¹⁶.

Furthermore, it performs significantly above the EU-28 average in dimensions relating to the availability of national R&D to SMEs, proportion of people with ICT specialist skills, percentage of SMEs both introducing product or process innovation and collaborating with others¹¹⁷.

Various measures have been introduced to promote and integrate the use of digital technologies within the Dutch economy. During 2018, the Dutch government published the Smart Industry Implementation Agenda (*Implementatieagenda Smart Industry*) for the period 2018-2021. The agenda aims to increase productivity and employment opportunities while solving societal challenges through the reduction of raw materials and energy consumption. In addition to the manufacturing industry, this also includes companies active in the chemical and construction sectors¹¹⁸.

Another noteworthy programme is 'Construction Agenda 2017-2021'¹¹⁹, consisting of 11 roadmaps and 6 overarching themes together with the involvement of more than 50 representatives from social groups, the government and the construction sector. The programme targets infrastructure, utility construction and housing market segments within the broad construction sector and encourages mutual cooperation between established firms and SMEs. In June 2018, the Dutch

government established the Construction and Innovation Centre (*Bouw en Techniek Innovatiecentrum- BTIC*). It has been created to tackle the sustainability challenges of the construction sector, with a target to establish long-term knowledge sharing programmes to foster innovation.

The Construction and Innovation Centre connects the private sector to policymakers, encouraging bilateral communication. It also contributes to the Dutch Construction Agenda targets in terms of innovation¹²⁰.

BTIC has created five Knowledge and Innovation Programs including Integral Energy Transition for Existing Buildings (IEBB), Digitisation, Circularity, Infrastructure, Area Development and Climate Adaptation. The BTIC initiated a consortium that started in December 2019 with IEBB. With the grant of EUR 13.8 million in the context of the Multi-Annual Mission-Driven Innovation Programs (MMIPs) and a program worth EUR 21.4 million, it has planned to develop affordable and user-friendly renovation concepts in the coming years¹²¹.

The Netherlands' smart policy innovation is also facilitating urban renewal and green building projects. The country has set its target on a fully circular economy by 2050 and is working towards a 50% reduction in primary raw material use at the midway mark of 2030. This policy has a big impact on measures to make its building and construction sector more sustainable as well¹²².

The Netherlands is also at the forefront of the implementation of **Building Information Modelling (BIM)** in the construction sector. As compared to other European countries, BIM adoption is high in the Netherlands, as currently 80.0% Dutch architects make use of it. This is mainly due to the digitalisation of the market and the cooperation between different stakeholders in the construction sector. These stakeholders include main contractors, the constructors, the electrical installation companies, and advisors¹²³.

With regards to BIM implementation in the country, the Dutch Building Information Council (BIR) is a main actor. BIR is active in the development, promotion and implementation of Open BIM Standards¹²⁴, which allows the classification of the large amount of data generated during a

construction project, and exchange information, thus increasing cooperation between construction parties and fostering healthy competition on the market. To this end, the Netherlands has created a **BIM Gateway (BIM-loket)**¹²⁵, which it intends to be a national portal for information and management of open BIM standards in the Netherlands, thus stimulating their use. By bringing together open BIM standards into one coherent system, the BIM-loket allows stakeholders to reduce their maintenance costs and employ the use of BIM bots to boost productivity¹²⁶.

The Dutch government also promotes the need for BIM adoption through education or several professional courses.

The Building Information Council collaborates with Dutch Universities of Applied Sciences to improve the integration of BIM in education and encourages them to share experiences. The BIR (*Bouw Informatie Raad*) Programme Office functions as a sounding board in this regard¹²⁷.

6

National and regional regulatory framework

Policy schemes

The housing policy in the Netherlands is implemented by the **Ministry of the Interior and Kingdom Relations (BZK)**¹²⁸, which is in charge of setting the legal framework related to the development of construction activities¹²⁹.

In the Netherlands, **housing associations** are responsible for the rent and sale of social housing and providing homes for older people and the disabled. Around 75.0% of the 3.0 million rental homes in the Netherlands belong to these associations¹³⁰. The renting conditions of these social dwellings are established by the government, and the current threshold (in 2020) is EUR 737.1 per month (EUR 720.4 per month in 2019). In addition, each year these associations must let 80.0% of their dwellings to low income tenants with an annual income up to EUR 39,055 (in 2020) and 10.0% to people with an annual income up to EUR 43,574 (in 2020). The remaining 10.0% can be allocated to people with higher incomes¹³¹.

Housing associations contribute to the **removal of accessibility barriers**, improving the accessibility to quality housing for elderly people, people with disability and those needing assisted housing. In addition, these associations are also in charge of maintaining the neighbourhoods and surroundings, including alleyways and parking spaces¹³².

The housing market in Netherlands is characterised by large owner-occupied and social housing sectors, each of which receive subsidies through different channels. The **Social Housing Guarantee (Waarborgfonds Sociale Woningbouw - WSW)** is an active actor by providing securitisations and guarantees to lenders. The WSW obtains capital for the provision of guarantees through the capital

market and guarantees loans to housing associations for social housing projects or the construction of buildings of public interest¹³³.

The Dutch government has also planned to boost construction through a tax credit against the levy on landlords totalling EUR 100 million per annum. This will offer a direct stimulus to housing associations and other landlords engaged in building more affordable rental homes. The amount of tax credit can also be used flexibly over time to respond immediately to the necessity to build more affordable homes¹³⁴.

Furthermore, the government has planned to allocate EUR 1.0 billion, spread evenly over 10 years, for targeted tax reductions for social housing corporations building new homes¹³⁵. In addition, the government announced adjustments to the rent-setting system for social housing, as part of the September 2019 housing market package mentioned. This implies that more homes remain in the regulated sector rather than transitioning to the private rental market¹³⁶.

Currently, the market faces a shortage of housing, i.e. a lack of rental houses and affordable houses for sale. The construction of new homes and the privatisation of social housing is insufficient to solve the shortage of rental housing¹³⁷.

The private rental market does not receive any subsidy from the government. Currently, it constitutes about 13.0% of the overall number of homes and remains relatively underdeveloped. This results in a shortage of rental housing and high rents.¹³⁸

The Dutch government has taken several measures with regards to private rental housing.

In May 2019, the Mid-priced Rental Segment Measures Act (*Wet maatregelen middenhuur*) was adopted. The Act defines that homes in the mid-priced rental segment can be allocated on the basis of the housing allocation set out in the Housing Act (*Huisvestingswet*)¹³⁹.

This amendment to the 2014 Housing Act and the Housing Act has two objectives. Firstly, it aims to clarify that municipalities can use the housing regulation to allocate homes in the mid-rental segment. Secondly, it simplifies the market test for housing corporations. This makes it easier for them to build mid-rental homes if this is desired at a local level¹⁴⁰.

In September 2019, the government introduced investment subsidies amounting to EUR 1.0 billion for a Residential Construction Stimulus Programme (*woningbouwimpuls*), aimed at boosting construction. The amount will be distributed over a period of four years and will be available to municipalities where shortages are most acute¹⁴¹.



To address the existing shortage, as well as expected demographic developments, the government is planning to construct 75,000 homes per year until 2025¹⁴².

In order to ensure that few people get into financial difficulties due to COVID-19, the Dutch government introduced new and temporary legislation in March 2020. This legislation allows a temporary lease contract to be extended for a short period during this crisis, so that those with an ending temporary lease will not be forced to move during an already difficult time¹⁴³.

Building regulations

The three main pieces covering all aspects of building regulations are the New Housing Act, the Building Decree and the Spatial Planning Act.

- **New Housing Act**¹⁴⁴ (*Nieuwe Woningwet*), in force since July 2015, defines the core tasks and activities of housing associations, as well as the procedures relative to construction and the provision of construction permits. In addition, the

Housing Act also ensures a clear separation of Services of General Economic Interest (SGEI) activities and non-SGEI activities, limiting government aid only to the former.

- **Building Decree** (*Bouwbesluit*) records requirements and establishes minimum criteria for health, safety, usability, energy efficiency and the environment for the construction of buildings in the Netherlands¹⁴⁵. In addition, the Building Decree sets the regulatory framework regarding the refurbishment, construction, demolition and occupancy of any building in the Netherlands. Amendments are expected to enter in force on January 01 2021, imposing **Almost Energy Neutral Building requirements** (*Bijna Energieneutrale Gebouwen, BENG*) for office buildings¹⁴⁶. This will be applicable for all construction companies and businesses that want to have a new building built.
- Additionally, there is a new law proposal – the Quality Assurance Act for construction (*Wet kwaliteitsborging voor her bouwen*) – expected to come into effect by 2021. It involves a new set of quality assurance measures¹⁴⁷. The construction company, and not the local government, become responsible for compliance with the Building Decree.
- **Spatial Planning Act** (*Wet op de Ruimtelijke Ordening*) defines what may be built and where the construction can take place, as well as the size and structure of the construction project depending on rules and regulations established in the area concerned¹⁴⁸. Implementation of the spatial planning policy is mainly done at municipal level due to their knowledge of the local environment. Their interests are presented on spatial visions, which are policy papers summarising the priorities for infrastructure and spatial planning¹⁴⁹.

In 2017, amendments were made to the Environment and Spatial Planning Laws to make it quicker and easier for projects to get off the ground. This legislation is expected to come into force in 2021¹⁵⁰. In addition, due to the highly regulated use of land for residential and business purposes, the **Zoning Plan** contains regulations on a detailed scale for every plot of land in a municipality. These

regulations indicate and determine the use of the plot (i.e., agricultural, industrial, residential, etc.) and the dimensions (building height, volume, number of stories) of the buildings permitted and the exact location of a new building on a plot of land. The Zoning Plan is the decisive mechanism for allowing or denying a general environmental permit (*omgevingsvergunning*) by the municipality of each region¹⁵¹.

In May 2019, the Council of State ruled that the Dutch legal frameworks for nitrogen deposits put in place by the government do not meet the criteria set by European standards. This judgment stopped the permit granting procedure for new-build projects in the vicinity of Natura 2000 areas. In addition, construction projects were also halted due to the tightening of the PFAS standard, which has the objective to improve the natural environment and limit the spread of polluted soil¹⁵².

Insurance and liability related regulations

By law or under a typical construction contract, Construction All Risks (CAR) is the most common insurance in the construction sector, covering all damages that may arise during the construction process¹⁵³.

During the construction process, CAR provides insurance against risks. In order to cover its liability as employer, each party needs to take out the requisite liability insurance and business liability insurance. In addition, the parties must also either have already taken out or receive professional indemnity insurance, as well as fire insurance and storm and tempest insurance¹⁵⁴.

In the Netherlands, the only compulsory insurance in construction is the WAM, concerning

construction accidents. Parties can choose to additionally insure themselves.

The Netherlands is one of the first nations of the 172 International Maritime Organisation (IMO) countries to ratify the Hong Kong Convention in February 2019, setting out agreements relating to the safe and environmentally sound scrapping and recycling of seagoing vessels¹⁵⁵.

The Ministry of Housing, Spatial Planning and the Environment is in charge of establishing the rules for construction. The Title 7.12 “Construction agreement” of the Civil Code defines the general contractual liabilities among parties in the construction sector, including the duties of the partners, the liabilities for materials and equipment, the reparation of construction defects or the dissolution of the construction agreement, among others¹⁵⁶.

Further to the provision of the Civil Code, the general conditions, and in particular the uniform general conditions regarding building contracts (UAV), are also widely used. UAV contracts establish a period of liability of five years following the completion of the works, and a statutory warranty period of ten years is generally applied defined for building defects.

Moreover, in the Netherlands, the legal provisions of the contracts generally act as standard clause acts, constituting the main reference for formation of contractual relations in the construction sector. Therefore, liabilities are often defined in the contractual agreements. However, the large variety of contract models may hinder the understanding of these liabilities. In order to tackle this issue, the Dutch Institute for Construction Law (*Instituut voor Bouwrecht*) has issued a practical guide that compiles and summarises the main features of construction contracts.

Current status and national strategies to meet Construction 2020 objectives

TO 1 – Investment conditions and volumes

Total investment by the broad construction sector¹⁵⁷ has generally increased after its lowest point in 2012 (Figure 10), highlighting the accelerating recovery by the sector in the aftermath of the economic crisis. In fact, investment by the real estate activities sub-sector grew by 31.1% over the 2010-2018¹⁵⁸ period, going up from EUR 35.6 billion to EUR 46.7 billion. Similarly, investment by the narrow construction sub-sector increased by 57.3% during 2010-2018¹⁵⁹, from EUR 2.3 billion to EUR 3.6 billion.

Total investment by the narrow construction sub-sector during 2010-2018

↑ 57.3%

Total investment by the real estate activities sub-sector between 2010 and 2018

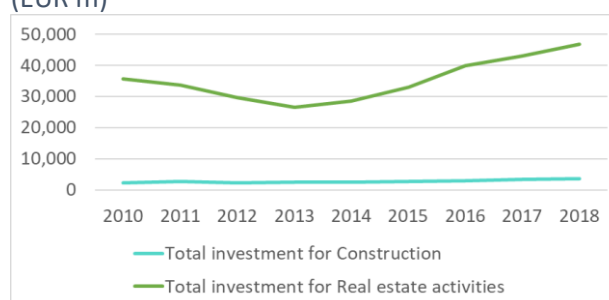
↑ 31.1%

In parallel, investment in intellectual property products by the narrow construction sub-sector increased by 43.8%, from EUR 600.0 million in 2010 to EUR 862.5 million in 2018¹⁶⁰. Conversely, investment by the real estate activities sub-sector for this category declined by 2.2%, reaching EUR 91.0 million in 2018¹⁶¹ as compared to EUR 93.0 million in 2010.

Investment in intellectual property products by the narrow construction sub-sector between 2010 and 2018

↑ 43.8%

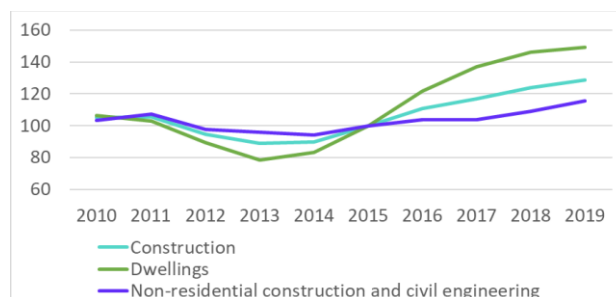
Figure 10: Investment by the Dutch broad construction sector between 2010 and 2018 (EUR m)



Source: Eurostat, 2020

The investment index in the broad construction sector¹⁶² has experienced a moderate growth since 2015, rising by 28.8% over 2015-2019 (Figure 11).

Figure 11: Investment index in the Dutch construction sector between 2010 and 2019 (2010=100)



Source: AMECO, 2020.

The growth was mainly driven by investment in dwellings by the whole economy and non-residential construction and civil engineering which increased by 49.1% and 15.4% respectively, between 2015 and 2019. In absolute terms, investment in the broad construction sector totalled EUR 78.6 billion in 2018¹⁶³, out of which EUR 41.5 billion were invested in non-residential and civil engineering and EUR 37.1 billion was devoted to dwellings¹⁶⁴.

Total Investment in dwellings by the whole economy during 2015-2019



49.1%

After declining continuously between 2010 and 2016, total **household renovation spending** increased to EUR 1,356 million in 2018, marking a 4.6% growth over the previous year. However, this is well below the EU-27 average of EUR 72.1 billion and represents an overall decline of 5.4% against the 2010 level (EUR 1,434 million). In 2018, spending on renovation stood at 0.4% of total household disposable income, lower than the EU-27 average of 0.9%.

Furthermore, the Ministry of Infrastructure and Environment manages the **Infrastructure Fund** (*Infrastructuurfonds*), which provides funding for the construction, management, maintenance and operation of infrastructure, such as roads, railways and waterways. The fund is set to operate until 2031 with an overall budget of EUR 5.5 billion¹⁶⁵.



In order to help construction workers and accelerate construction works which got affected due to COVID-19, the Dutch government introduced a first package of work amounting to over EUR 44.0 million, in June 2020¹⁶⁶.

This primarily consists of maintenance work on the Dutch infrastructure, such as the accelerated execution of asphalt work, maintenance and renovation of locks, tunnels or bridges or work for coastline maintenance. The construction of an innovative lane and service area on the A58 between Tilburg and Eindhoven is expected to be put out on the market soon and the tender for a major project for the widening of the A1 between Apeldoorn and Azelo will be brought this year instead of next year¹⁶⁷.

In order to support its infrastructure projects, the Netherlands received EUR 62.0 million from the European Commission in July 2020. The funds will be used for road, rail and water projects in the country¹⁶⁸.

Most of these infrastructure projects come under the **Trans-European Transport Network (TEN-T) programme**, which aims to create a single cross-border network for land, water and air

transport within the EU. A total of 11 projects in which Dutch parties are involved will receive a subsidy worth EUR 82.0 million¹⁶⁹.

In the current Multiannual Financial Framework, the financial allocation from the EU Cohesion Policy funds for the Netherlands, including national co-financing, stands at EUR 2.4 billion. This is equal to around 0.05% of the country's annual GDP. By 2019, the Netherlands had spent EUR 1.3 billion on the selected projects¹⁷⁰.

By the end of 2019, the Connecting Europe Facility (CEF) allocated EUR 508.0 million to 77 transport projects with a total investment value of EUR 1.6 billion¹⁷¹.

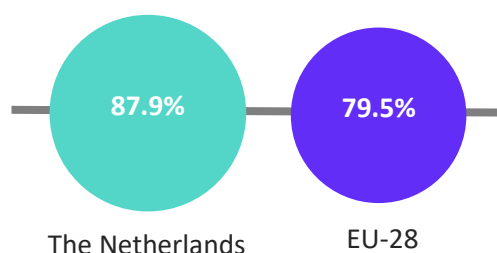
Furthermore, in 2019, the EIB invested EUR 2.8 billion in the Netherlands including EUR 786.0 million in infrastructure, EUR 783.0 million in SMEs, EUR 757.0 million in environment and EUR 498.0 million in innovation financing¹⁷².

TO 2 – Skills

The Netherlands has a well-developed system for **vocational education and training (VET)**. In 2017¹⁷³, participation in VET stood at 68.2%, compared to the EU-28¹⁷⁴ average of 47.8%. Similarly, the **employment rate of recent VET graduates** slightly increased to 87.9% in 2018¹⁷⁵, from 86.9% in 2017, above the EU-28¹⁷⁶ average of 79.5%. However, the share of early leavers from education and training marginally increased in 2018 for the first time since 2013, from 7.1% in 2017 to 7.3% in 2018. This is below the EU-28 average of 10.6%¹⁷⁷. In addition, the dropout rate in VET increased from 4.7% in 2017 to 5.1%¹⁷⁸.

In February 2019, the Education Council introduced a number of recommendations to combat this dropout rate. One of them was to integrate the pre-vocational (VMBO) and the vocational (MBO) tracks to reduce the number of transitions, because transitions lead to a high risk of drop out¹⁷⁹.

Employment rate of recent VET graduates, 2018



A number of measures have been taken to align the skills supply to the needs of regional labour markets. Introduced in 2013, the **Technology Pact** (*Techniekpact*) was updated in 2016 for the period 2016-2020. It is aimed at aligning education with industry needs and consists of specific agreements between industry, education providers and the government¹⁸⁰.

More specific to the construction sector, a collaboration between training institutions in construction launched a joint platform (**bouwopleiders.nl**) dedicated to school pupils, school leavers and graduates, who are interested in a career in construction, providing them information and advice on the training offer in the construction sector¹⁸¹.

In terms of paying attention to circular construction at all educational levels and in all educational programmes in 2021, the Dutch government has planned to offer a circular architect training programme and a circular commissioning training programme. This is a part of Circular Construction Economy Transition Agenda^{182,183}.

TO 3 – Resource efficiency / Sustainable construction

The energy saving strategy is mainly developed in the **Energy Agreement for Sustainable Growth** (*Energie akkoord*), a voluntary agreement launched by the Social and Economic Council of the Netherlands (SER) and signed in 2013 with more than 40 participants, including the 36 largest municipalities in the Netherlands¹⁸⁴. The agreement also aims at creating at least 15,000 jobs per year in the construction and installation sectors, for instance, as a result of energy savings and local energy generation¹⁸⁵.

In order to achieve renewable energy targets, the Dutch government has introduced the **Sustainable Energy Production Incentive (SDE+) scheme**. The scheme provides financial support to producers for the renewable energy they generate. In 2019, a total of EUR 10.0 billion was allocated to subsidise renewable energy projects¹⁸⁶.

During 2017-2020, the Netherlands' production of renewable energy grew by over 70.0% from 140 PJ to an expected 239 PJ. This is mainly driven by measures and incentive instruments, such as the SDE+ scheme and offshore wind energy policy¹⁸⁷.

For the building sector in particular, the agreement stipulates that 300,000 existing residential buildings per year should be renovated and upgraded by at least two energy classes until 2020 (corresponding to an improvement in energy efficiency of 20-30%). All new buildings in the Netherlands must be nearly-zero energy by the end of 2020. Rented buildings must have an average label B for social housing and a minimal label C for 80% of the private rental stock by 2020¹⁸⁸. In addition, in accordance with the amendment to the 2012 Building Decree, all office buildings larger than 100 square metres (m²) will be obliged to be more energy efficient and, as minimum, have an energy label C from 2023 onwards. In order to meet this requirement, the Dutch government will support with advice and grants. The amendment states that from January 01, 2023 it will be prohibited to use an office building without having minimum energy label C¹⁸⁹.

In order to make financing for energy efficiency in the existing building stock affordable and readily available the **National Energy Saving Fund** (*Nationaal Energiebespaar fonds* - NEF) was set up in 2014 under the Energy Agreement. The NEF provides **Energy Saving Loans** (*Energiebespaarlening voor particulieren*) to homeowners with low-interest rates to finance energy-saving measures. These measures include insulation or more efficient heating systems, as well as installing solar panels for a cleaner energy supply¹⁹⁰.

In March 2020, the European Investment Bank (EIB) announced its plans to support the NEF with a loan of EUR 150.0 million¹⁹¹.

The NEF has currently a total of EUR 1.0 billion available to offer loans up to EUR 25,000 per house

to homeowners and homeowner associations in the Netherlands who want to reduce their energy bills¹⁹².

Moreover, under the Energy-saving at Home subsidy scheme (*Subsidie energiebesparing eigen huis - SEEH*), homeowners associations can obtain energy saving subsidies for buildings covering up to 20% of the costs of insulation works if they choose at least two types of insulation measures (e.g. insulation of roof, wall, floor, replacement of glass, etc.)¹⁹³. A total of over EUR 56.0 million was allocated as a subsidy for energy saving measures (funds spread across the years 2016, 2017 and 2018). The scheme will remain available till December 31, 2022¹⁹⁴.

TO 4 – Single Market



According to the EU Single Market Scoreboard 2020, the Netherlands performs well in terms of trade integration in the single market for goods and services¹⁹⁵.

As per the report, the country's score regarding the transposition deficit doubled in 2019 (0.6%) as compared to 2018 (0.3%) but stayed in line with the EU-28¹⁹⁶ average (0.6%). In terms of the average delay for overdue directives, it stood at 12.0 months, slightly lower than the EU-28 average (11.5 months) in 2019, but above the 2018 levels (10.8 months)¹⁹⁷. Furthermore, the conformity deficit for the country stood at 1.4% in 2019, slightly above the EU-28 average of 1.2%.

In terms of Internal Market Information System, the Netherlands performs fairly well. However, its performance was below the EU-28 average in all the five indicators. The number of pending cases under infringement worsened in 2019 with 26 cases as compared to 2018 (23 cases), while it is below the EU-28 average (29 cases). This is primarily due to the limited use of the EU Pilot tool which increased the number of infringement proceedings against several member states.

Its trade integration in the single market for goods and services is above the EU-28 average¹⁹⁸.

According to the Small Business Act for Europe (SBA) Fact Sheet 2019, the Netherlands has the highest score (3.5) in terms of market access for new and growing firms, above the EU-28¹⁹⁹ average score (2.8). Similarly, its score (3.2) with regards to 'market access for new and growing without being unfairly blocked by established firms' is above the EU-28 average (2.8)²⁰⁰.

In 2019, performance in Public Procurement was average. The Netherlands is positioned among the best countries in the EU in its ability to develop mechanisms to control corruption in public procurement. While procurement corruption does not hinder doing business in the country, risks of corruption are reportedly largest in the construction and the real estate sectors, in which previous cases have shown irregularities, collusion and cartel practices between local public officials and businesses²⁰¹.

With regards to improvement in the public procurement system, the Ministry of Economic Affairs released an 'Agenda for Better Public Procurement' (*Actieagenda Beter Aanbesteden*) in February 2018. The objective is to boost the procurement expertise of municipalities and government entities, including by improved cooperation between public buyers. In 2018, only 4.0% of procedures in the country involved more than one buyer, one of the lowest levels in the EU. Moreover, the government is also taking measures to digitalise the procedures for procurement. In the Netherlands, the e-procurement services are provided to contracting authorities by the market together with the **TenderNed** system which is run by the government²⁰².

In terms of the regulatory environment in the construction sector, the Netherlands appears to offer a **higher level of compliance with the Services Directive** compared to other Member States. Horizontal authorisation schemes have not been established, and therefore do not constitute a barrier for the provision of construction services by foreign providers. Recently, the Dutch government had also a web platform²⁰³ on Brexit to act as an early warning system for SMEs²⁰⁴. The objective is to enable SMEs to track upcoming legislation and empowering them to take advantage or mitigate the potential negative impact of any new regulations.

TO 5 – International competitiveness



According to the **Global Competitiveness Index 2019**, the Netherlands ranks **4th out of 141 economies**, two places higher than the previous year (6th)²⁰⁵.

According to the index, in terms of trade openness, the Netherlands ranks 5th with respect to border clearance efficiency out of 141 economies, 7th in terms of trade tariff percentage and prevalence of non-tariff barriers, while 113th when it comes to complexity of tariffs²⁰⁶.

The **internalisation of construction products** in the Dutch construction sector has shown signs of growth for the past few years. The export values of all construction-related products increased from EUR 2.3 billion in 2010 to EUR 3.9 billion in 2018, marking an increase of 67.7%. The Netherlands' share of exports of all construction-related products in 2018 stood at 50.7% of the total production value, higher than the 2010 level of 29.5%. This is also well above the EU-27 average of 11.4%.

Export value of all construction-related products between 2010 and 2018

↑ 67.7%

Similarly, the export value of architectural services has boomed, growing significantly by 813.4%, from EUR 0.8 million in 2010 to EUR 7.4 million in 2018. It further increased to EUR 10.8 million in 2019, registering an increase of 46.0% over the previous year and a remarkable growth of 1233.4% over the 2010-2019 period.

Export value of architectural services between 2010 and 2019

↑ 1233.4%

In the context of **inward FATS (foreign affiliates statistics)**²⁰⁷, value added at factor cost in the

narrow construction and the real estate activities sub-sectors increased by 50.7% and 156.7% respectively between 2010 and 2017²⁰⁸. Similarly, the turnover in the narrow construction and the real estate activities sub-sectors grew by 43.5% and 130.5% respectively during the 2010-2017 period.

According to the **SBA Fact Sheet 2019**, the Netherlands performed well in the context of involvement in the trade community and availability of information. Despite an increase in the share of SMEs that export online outside the EU, its performance is in line with the EU average²⁰⁹.

Support to the internationalisation of Dutch companies is ensured through several initiatives. The Action Plan for the Cross-border Economy and Labour (*Actieprogramma grensoverschrijdende economie en arbeid*) launched in 2017 fosters cross-border cooperation between companies and educational institutions and ensures a lower administrative burden and fewer legal obstacles to doing business in the border region²¹⁰. In order to reduce the risks of exporting to foreign markets, the government introduced the **Export Credit Insurance (ECI)** facility. The scheme is particularly addressed to the export of capital goods or capital-intensive services to non-EU countries, in high-risk sectors including contracting, dredging, construction and shipbuilding. It aims to mitigate the risk of non-payment from foreign buyers, safeguarding national competitiveness and boosting exports²¹¹.

Moreover, the **International Business Network** (*Netwerk Internationaal Ondernemen – NIO*), an independent consultative body consisting of several trade promotion organisations and the Dutch Ministry of Foreign Affairs, launched the **internationaal ondernemen.nl** portal, providing information on business opportunities in foreign markets across all sectors (including construction and infrastructure) and support to internationalisation and exporting²¹².

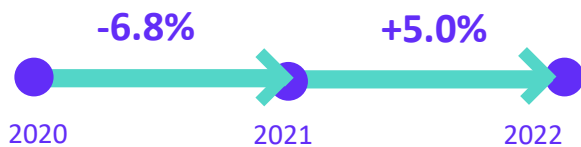
8

Outlook

The Dutch economy is forecasted to contract in 2020, before witnessing a revival in 2021. This is mainly due to the COVID-19 pandemic and associated restrictions²¹³.

The Netherlands' GDP is expected to decline by 6.8% in 2020 and then increase by 5.0% in 2021, reaching EUR 741.1 billion in 2021.

Expected GDP growth between 2019-2021

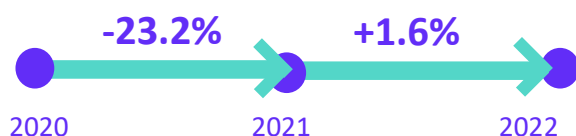


Mirroring the overall economy, the **volume index of production** in the broad construction sector is projected to decline by 11.9 ip YoY in 2020 and then increase by 6.1 ip YoY in 2021.

As a result, the **turnover** of the broad construction sector is projected to annually decline by 23.5% in 2020 before rising by 1.4% in 2021, reaching a value of EUR 134.1 billion. Likewise, the **total value added** of the broad construction sector is expected to annually decrease by 21.3% in 2020 and then increase by 1.2% in 2021 respectively, reaching EUR 48.7 billion in 2021.

In parallel, the number of **persons employed** in the broad construction sector is also expected to annually decrease by 23.2% to 572,624 in 2020 and then increase by 1.6% to 581,763 in 2021. Most of this decline is forecasted to come from the narrow construction (-28.4%), and the manufacturing (-26.7%), sub-sectors.

Number of persons employed in the broad construction sector between 2020 and 2022



Similarly, the growth in **housing** construction activity is expected to pick up again as soon as capacity issues and the nitrogen and PFAS problems are solved. In the medium and long-term, more housing is required, and infrastructure needs to be maintained and upgraded. In order to address the existing shortage as well as expected demographic developments, the Dutch government has planned to construct 75,000 homes per year until 2025.

The **civil engineering** sector is expected to be driven by the government's focus on the development of road, port and railway infrastructures and EU support. In July 2020, the Netherlands received EUR 62.0 million from the European Commission. The funds will be used for road, rail and water projects in the country.

In addition, to help the construction workers and accelerate construction works which got affected due to COVID-19, the Dutch government introduced a first package of work, amounting to over EUR 44.0 million, in June 2020. This primarily consists of maintenance work on Dutch infrastructure, such as the accelerated execution of asphalt work, maintenance and renovation of locks, tunnels or bridges or work for coastline maintenance.

In conclusion, the outlook for the Dutch construction sector is positive on the mid to long-term, particularly due to infrastructure projects and housing investments by the government. However, the PFAS and nitrogen problems are already causing delays in infrastructure and construction projects, and it is expected to negatively impact the construction sector in the coming years, in the absence of any policy measures²¹⁴.

References

- 1 No data is available for the breakdown into production in construction of buildings and production in civil engineering.
- 2 The Netherlands: Again amongst the quickest growing countries of the Eurozone, December 2019.
<https://economics.rabobank.com/publications/2019/december/the-netherlands-amongst-quickest-growing-countries/>
- 3 Data unavailable for 2019.
- 4 European Commission, Country Semester Report, the Netherlands 2020 – February 2020.
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 5 Artadius- Market Monitor Construction Netherlands 2020- March 2020. <https://atradiuscollections.com/global/reports/market-monitor-construction-netherlands-2020.html>
- 6 Construction works resume in Belgium and continue in the Netherlands, April 2020. <https://www.designbuild-network.com/comment/belgium-construction-the-netherlands/>
- 7 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 8 No data is available for the breakdown into production in construction of buildings and production in civil engineering.
- 9 Please note that this 2019 data is a nowcast - please refer to the methodology notes for further details.
- 10 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.
- 11 Data for broad construction is unavailable for subsequent years.
- 12 Data unavailable for subsequent years.
- 13 European Commission, Country Semester Report, the Netherlands 2020 – February 2020.
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 14 Apparent labour productivity refers to the Gross Value Added per person employed
- 15 The gross operating rate is the ratio of Gross Operating Surplus to Turnover and is an indicator of profitability.
- 16 Data unavailable for subsequent years.
- 17 Data unavailable for subsequent years.
- 18 European Commission, Country semester Report, the Netherlands 2020 – February 2020.
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 19 Ibidem.
- 20 Ibidem.
- 21 Data unavailable for 2019.
- 22 Long-term care services refer to the organisation and delivery of a broad range of services and assistance to people who are limited in their ability to function independently on a daily basis over an extended period of time, due to mental and/or physical disability. These services include assistance with activities of daily living (ADL), such as eating, bathing, dressing, etc., as well as basic medical services (wound dressing, medication, palliative care, etc.), Instrumental Activities of Daily Living (IADL) (meals, shopping, housework) and sometimes cash benefits to pay for services mainly provided by the private sector.
- 23 European Commission, Country Semester Report, the Netherlands 2020 – February 2020.
<https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 24 Ibidem.
- 25 World Bank Group, Doing Business 2020, Economy Profile for the Netherlands.
<http://www.doingbusiness.org/data/exploreeconomies/netherlands>
- 26 2019 SBA Fact Sheet - Netherlands. <https://ec.europa.eu/docsroom/documents/38662/attachments/21/translations/en/renditions/native>
- 27 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 28 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 29 2019 SBA Fact Sheet - Netherlands. <https://ec.europa.eu/docsroom/documents/38662/attachments/21/translations/en/renditions/native>
- 30 Ibidem.
- 31 Data unavailable for subsequent years.
- 32 PFAS are man-made substances that do not occur in the environment naturally. They are mainly used in consumer products for example because they repel water, grease and dirt. With the use of these products, factory emissions and incidents, PFAS has been released into the environment. PFAS do not degrade, can easily spread in the environment and can gather in animals, plants and the human body.
- 33 Sharper decline in business confidence, November 2019. <https://www.cbs.nl/en-gb/news/2019/46/sharper-decline-in-business-confidence>
- 34 Data unavailable for 2019.
- 35 Data unavailable for 2019.
- 36 According to Eurostat, construction services comprises Construction Abroad (code 250) and Construction in the Compiling Economy (code 251). They do not include architectural services or engineering services.
- 37 Data unavailable for 2019.
- 38 Data prior to 2014 is not available
- 39 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 40 SME access to finance conditions 2019 SAFE results – Netherlands.
<https://ec.europa.eu/docsroom/documents/38442>
- 41 Ibidem.

Country Fact Sheet Netherlands

- 42 Atradius, Market Monitor - Construction industry – Netherlands, March 2020. <https://atradiuscollections.com/global/reports/market-monitor-construction-netherlands-2020.html>
- 43 European Investment Bank- EIBIS 2019 - Netherlands overview, November 2019. https://www.eib.org/attachments/efs/eibis_2019_netherlands_en.pdf
- 44 Ibidem.
- 45 European Commission, Country Semester Report, the Netherlands 2020 – February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 46 European Commission- State aid: Commission approves Dutch guarantee scheme of up to €10 billion to support the economy in context of coronavirus outbreak, April 2020. https://ec.europa.eu/commission/presscorner/detail/en/IP_20_687
- 47 Ibidem.
- 48 Data unavailable for subsequent years.
- 49 Bouwinvest Dutch Real Estate Market Outlook 2020-2022, <https://www.bouwinvest.nl/media/4305/bouwinvest-dutch-real-estate-market-outlook-2020-2022.pdf>
- 50 Bouwinvest Dutch Real Estate Market Outlook 2020-2022, <https://www.bouwinvest.nl/media/4305/bouwinvest-dutch-real-estate-market-outlook-2020-2022.pdf>
- 51 The Dutch mortgage market: overview and recent developments, May 2020. <https://www.aegonassetmanagement.com/netherlands/news-and-insights/the-dutch-mortgage-market-overview-and-recent-developments/>
- 52 National Reform Programme 2020- The Netherlands. https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-netherlands_en.pdf
- 53 Housing Shortage: 845,000 Homes Must Be Built By 2030- June 2020. <https://nltimes.nl/2020/06/16/housing-shortage-845000-homes-must-built-2030>
- 54 Strong house price rises continue in The Netherlands- June 2020. <https://www.globalpropertyguide.com/Europe/Netherlands/Price-History>
- 55 Ibidem.
- 56 Ibidem.
- 57 European Commission, Country Semester Report, the Netherlands 2020 – February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 58 Ibidem.
- 59 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.
- 60 Data unavailable for 2019.
- 61 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
- 62 The overcrowding rate is defined as the percentage of the population living in an overcrowded household.
- 63 Eurostat, Overcrowding rate. http://ec.europa.eu/eurostat/product?code=ilc_lvho05a&language=en&mode=view
- 64 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.
- 65 World Economic Forum, The Global Competitiveness Report 2019. http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
- 66 European Commission, Country Semester Report, the Netherlands 2020 – February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 67 Ibidem,
- 68 Data unavailable subsequent years.
- 69 Data unavailable subsequent years.
- 70 Market Monitor Construction Netherlands 2020, March 2020. <https://atradiuscollections.com/global/reports/market-monitor-construction-netherlands-2020.html>
- 71 Atradius- Payment Practices Barometer- Netherlands, October 2019. <https://group.atradius.com/publications/payment-practice-barometer-netherlands-2019.html>
- 72 Ibidem.
- 73 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 74 European Commission, Data and surveys – SAFE, Results by country, 2019. <https://ec.europa.eu/docsroom/documents/38442/attachments/1/translations/en/renditions/native>
- 75 Ibidem.
- 76 Ibidem.
- 77 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 78 DNB (2020). Payment Study 2020, https://www.dnb.com/content/dam/english/business-trends/DNB_Payment_Study_2020.pdf
- 79 Intrum: European Payment Report 2020, Special Edition COVID-19 White Paper https://www.intrum.com/media/8279/epr-2020-special-edition-white-paper_final.pdf
- 80 Ibidem.
- 81 Ibidem.

- 82 Euler Hermes- Collection Profile- The Netherlands, https://www.eulerhermes.com/content/dam/onemarketing/ehndbx/eulerhermes_com/en_gl/erd/collection/Netherlands.pdf
- 83 World Bank Group, Doing Business 2020. <https://www.doingbusiness.org/content/dam/doingBusiness/country/n/netherlands/NLD.pdf>
- 84 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.
- 85 Data unavailable for 2019.
- 86 European Commission- Education and Training Monitor 2019- Netherlands. https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2019-netherlands_en.pdf
- 87 Data unavailable for 2019.
- 88 Data unavailable for 2019.
- 89 European Commission, Country Semester Report, the Netherlands 2020 – February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 90 European Commission, Country Semester Report, the Netherlands 2020 – February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 91 Education and Training Monitor 2019 – Netherlands. https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2019-netherlands_en.pdf
- 92 Data unavailable for subsequent years.
- 93 Eurostat, Generation of waste by waste category, hazardousness and NACE Rev. 2 activity, <https://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>
- 94 Construction sector leading in waste and recycling, November 2019. <https://www.cbs.nl/en-gb/news/2019/45/construction-sector-leading-in-waste-and-recycling>
- 95 Data unavailable for subsequent years.
- 96 The Netherlands joins leading group on Circular Economy. <https://www.government.nl/latest/news/2018/07/17/the-netherlands-joins-leading-group-on-circular-economy>
- 97 The Netherlands joins leading group on Circular Economy, July 2018. <https://www.government.nl/latest/news/2018/07/17/the-netherlands-joins-leading-group-on-circular-economy>
- 98 Government of the Netherlands, Environmental Management Act. <https://www.government.nl/topics/environment/contents/roles-and-responsibilities-of-central-government/environmental-management-act>
- 99 European Commission, Screening template for Construction and Demolition Waste management in The Netherlands. September 2015. http://ec.europa.eu/environment/waste/studies/deliverables/CDW_The%20Netherlands_Factsheet_Final.pdf
- 100 European Commission, Country Semester Report, the Netherlands 2020 – February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 101 Climate Agreement – Klimaatakkoord, June 2019. <https://www.klimaatakkoord.nl/binaries/klimaatakkoord/documenten/publicaties/2019/06/28/national-climate-agreement-the-netherlands/20190628+National+Climate+Agreement+The+Netherlands.pdf>
- 102 European Commission, European innovation scoreboard 2020- The Netherlands, <https://ec.europa.eu/docsroom/documents/41885>
- 103 Ibidem.
- 104 Data unavailable for subsequent years.
- 105 Data unavailable for subsequent years.
- 106 European Commission, Country Semester Report, the Netherlands 2020 – February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 107 Data unavailable for subsequent years.
- 108 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.
- 109 Data unavailable for subsequent years.
- 110 Data unavailable for subsequent years.
- 111 The 2019 EU Industrial R&D Investment Scoreboard, http://iri.jrc.ec.europa.eu/sites/default/files/contenttype/scoreboard/2019-12/SB2019_main%20stats_EU1000.xlsx
- 112 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 113 European Eco-Innovation Scoreboard 2018. https://ec.europa.eu/environment/ecoap/indicators/index_en
- 114 Ibidem.
- 115 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 116 Digital Economy and Society Index (DESI) 2020- The Netherlands. <https://ec.europa.eu/digital-single-market/en/scoreboard/netherlands>
- 117 2019 SBA Fact Sheet - Netherlands. <https://ec.europa.eu/docsroom/documents/38662/attachments/21/translations/en/renditions/native>
- 118 Dutch Digitalisation Strategy, June 2018. <https://www.government.nl/binaries/government/documents/reports/2018/06/01/dutch-digitalisation-strategy/Dutch+Digitalisation+strategy+def.pdf>
- 119 European Commission, European Innovation Scoreboard 2019. <https://ec.europa.eu/docsroom/documents/35903>

Country Fact Sheet Netherlands

- 120 2019 SBA Fact Sheet - Netherlands. <https://ec.europa.eu/docsroom/documents/38662/attachments/21/translations/en/renditions/native>
- 121 BTIC, <https://btic.nu/integrale-energietransitie-bestaande-bouw/>
- 122 The Netherlands adds a circular building touch, November 2019. https://ec.europa.eu/environment/ecoap/about-eco-innovation/policies-matters/netherlands-adds-circular-building-touch_en
- 123 USP – BIM use is on the rise in Europe- 2019. <https://www.euro-mat.com/news/usp-bim-use-is-on-the-rise-in-europe/>
- 124 A standard is a central and formal determination of information and process agreements set down in a document. The goal of the standard is to make interoperability possible and thus to enable IT systems to exchange data and share information and knowledge. An open standard is a standard with an open standardisation process. Therefore, the definition includes issues such as easily accessible documentation, no intellectual property rights constraints, open participation in addition to independence and the sustainability of the standardisation organisation.
- 125 **BIM-loket**, “**BIM-loket**” in short. <http://www.bimloket.nl/169>
- 126 BIM + geospatial interoperability would avoid another CAD + GIS quagmire, October 2019. <https://www.geospatialworld.net/blogs/bim-geospatial-interoperability-would-avoid-another-cad-gis-quagmire/#:~:text=The%20Netherlands%20has%20created%20a,Netherlands%20including%20related%20geospatial%20standards.>
- 127 Bouw Informatie Raad- <https://www.bouwinformatieraad.nl/p/90/Activities>
- 128 Government of Netherlands: Ministry of the Interior and Kingdom Relations <https://www.government.nl/ministries/ministry-of-the-interior-and-kingdom-relations>
- 129 Ministry of the Interior and Kingdom relations: Housing and renting: <https://www.government.nl/topics/housing/contents/rented-housing>
- 130 Ministry of the Interior and Kingdom relations: Housing and renting: <https://www.government.nl/topics/housing/contents/rented-housing;>
- 131 Social housing vs Private housing (free sector) in the Netherlands- 2020. <https://www.iamexpat.nl/housing/netherlands-rentals/social-housing-private-free-sector#:~:text=Social%20housing%20in%20the%20Netherlands,%20is%20737%2C14%20euros.>
- 132 Ministry of the Interior and Kingdom relations: Housing and renting: <https://www.government.nl/topics/housing/contents/rented-housing>
- 133 Social Housing Guarantee (WSW) website <https://www.wsw.nl/over-wsw/>
- 134 European Commission, National Reform Programme 2020 - The Netherlands, https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-netherlands_en.pdf
- 135 European Commission, Country Semester Report- The Netherlands 2020, February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 136 Ibidem.
- 137 NRC, ‘Tekort aan huurwoningen bereikt in 2018 hoogtepunt’, February 2017. <https://www.nrc.nl/nieuws/2017/02/13/tekort-aan-huurwoningen-bereikt-in-2018-dieptepunt-a1545774> .
- 138 European Commission, Country Semester Report- The Netherlands 2020, February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 139 Middle Rent Measures Act, June 2019. <https://www.pharosadvocaten.nl/nl/wet-maatregelen-middenhuur/>
- 140 Ibidem.
- 141 European Commission, National Reform Programme 2020 - The Netherlands, https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-netherlands_en.pdf
- 142 Ibidem.
- 143 Expat Housing Network, Tenant protection during COVID-19, March 2020. <https://expathousingnetwork.nl/blog/tenant-protection-during-covid-19>
- 144 Housing Europe: Netherlands review their Housing Act <http://www.housingeurope.eu/blog-455/netherlands-review-their-housing-act>
- 145 Institute for Housing and Urban Development Studies (IHS). European Experiences of Building Codes for Promoting Sustainable Housing: http://www.ihs.nl/fileadmin/ASSETS/ihs/Marketing/prospective_students_pages/ECO_and_MFUI/EU_Experiences_of_Building_codes.pdf
- 146 Business.gov.nl- New buildings must meet BENG requirements, <https://business.gov.nl/amendment/new-buildings-beng-energy-efficiency-requirements/>
- 147 Ploum Rotterdam, Quality Assurance Act for building: where are we now? <https://www.ploum.nl/wet-kwaliteitsborging-voor-het-bouwen-waar-staan-we-nu/>
- 148 Government of Netherlands. Spatial planning and infrastructure: <https://www.government.nl/topics/spatial-planning-and-infrastructure/contents/spatial-planning-in-the-netherlands>
- 149 Summary National Policy Strategy for Infrastructure and Spatial Planning: <https://www.government.nl/topics/spatial-planning-and-infrastructure/documents/publications/2013/07/24/summary-national-policy-strategy-for-infrastructure-and-spatial-planning>
- 150 Business.gov.nl- Building regulations, <https://business.gov.nl/regulation/building-regulations/>
- 151 Baker&McKenzie, Doing Business in the Netherlands, 2016. <http://www.bakermckenzie.com/-/media/files/insight/publications/2016/07/doing-business-in-the-netherlands-2016/dbiameadoingbusinessnetherlandsjul16.pdf?la=en>
- 152 European Commission, National Reform Programme 2020 - The Netherlands, https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-netherlands_en.pdf
- 153 DLA Piper- Real World Law Construction, October 2019. <https://www.dlapiperrealworld.com/law/index.html?t=construction&s=forms-of-contract-procurement-methods&q=insurances&c=NL>
- 154 Ibidem.
- 155 The Netherlands signs international treaty on the safe and environmentally sound recycling of ships. <https://www.government.nl/latest/news/2019/02/20/the-netherlands-signs-international-treaty-on-the-safe-and-environmentally-sound-recycling-of-ships>
- 156 Dutch Civil Code, <http://www.dutchcivillaw.com/legislation/dcctitle771212.htm>

- 157 This includes total investment by the construction and real estate sub-sectors, defined as gross fixed capital formation, i.e. acquisitions
minus disposal, of total fixed assets (e.g. machinery and equipment, vehicles, dwellings and other buildings).
- 158 Data unavailable for 2019.
- 159 Data unavailable for 2019.
- 160 Data unavailable for 2019.
- 161 Data unavailable for 2019.
- 162 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.).
- 163 Data unavailable for 2019.
- 164 The indicator gross fixed capital formation in non-residential and civil engineering refers to the Eurostat indicator «Other buildings and
structures»
- 165 Government of the Netherlands, An Infrastructuurfonds Rijksbegroting 2018, May 2019.
<https://www.rijksoverheid.nl/documenten/jaarverslagen/2019/05/15/infrastructuurfonds-2018>
- 166 Accelerate and invest in infrastructure projects, June 2020. <https://www.rijksoverheid.nl/ministeries/ministerie-van-infrastructuur-en-waterstaat/nieuws/2020/06/19/versnellen-en-investeren-in-infracprojecten>
- 167 Ibidem.
- 168 European money for Dutch infrastructure, July 2020. <https://www.rijksoverheid.nl/ministeries/ministerie-van-infrastructuur-en-waterstaat/nieuws/2020/07/16/europees-geld-voor-nederlandse-infrastructuur>
- 169 Ibidem.
- 170 European Commission, Country Semester Report- The Netherlands 2020, February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 171 Ibidem.
- 172 European Investment Bank- The Netherlands and the EIB.
<https://www.eib.org/en/projects/regions/european-union/netherlands/index.htm>
- 173 Data unavailable for 2019.
- 174 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 175 Data unavailable for 2019.
- 176 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
- 177 European Commission, Education and Training Monitor 2019, the Netherlands.
https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2019-netherlands_en.pdf
- 178 European Commission, Country Semester Report- The Netherlands 2020, February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
- 179 European Commission, Education and Training Monitor 2019, the Netherlands.
https://ec.europa.eu/education/sites/education/files/document-library-docs/et-monitor-report-2019-netherlands_en.pdf
- 180 Analysis of national initiatives on digitising European industry, October 2017.
https://ec.europa.eu/futurium/en/system/files/ged/nl_country_analysis.pdf
- 181 Bouwend Nederland, Website Bouwopleiders.nl live, June 2016. <http://www.bouwendnederland.nl/nieuws/2764077/website-bouwopleidersnl-live>
- 182 Circular Construction Economy, 2018. <https://hollandcircularhotspot.nl/wp-content/uploads/2019/09/Circular-Construction-Economy.pdf>
- 183 The Circular Construction Economy Transition Agenda sets out the strategy for achieving a circular construction economy by 2050 and
contains the Agenda for the 2018-2021 period. This Agenda has been drawn up by a transition team made up of experts from the fields of
science, the government, and market participants.
- 184 National Reform Programme 2020 The Netherlands, https://ec.europa.eu/info/sites/info/files/2020-european-semester-national-reform-programme-netherlands_en.pdf
- 185 Ibidem.
- 186 Ibidem.
- 187 Ibidem.
- 188 Global Buildings Performance Network, Netherlands.
<http://www.gbpn.org/databases-tools/rp-detail-pages/netherlands#RegulatoryMeasures>
- 189 Energy Performance of Companies and Buildings in the Netherlands, December 2018.
<https://www.pegasuslegalregister.com/2018/12/20/energy-performance/>
- 190 Government of the Netherlands, Energy Agreement for Sustainable Growth. <https://www.government.nl/topics/energy-policy/contents/energy-agreement-for-sustainable-growth>
- 191 EIB funds Dutch homes with €150m energy efficiency loans, March 2020. <https://www.energylivenews.com/2020/03/10/eib-funds-dutch-homes-with-%E2%80%8E150m-energy-efficiency-loans/>
- 192 Ibidem.
- 193 Rijksdienst voor Onderneming Nederland, Subsidie energiebesparing eigen huis. <http://www.rvo.nl/subsidies-regelingen/subsidie-energiebesparing-eigen-huis>
- 194 Energy-saving at Home subsidy scheme (SEEH), November 2019. <https://www.iea.org/policies/7732-energy-saving-at-home-subsidy-scheme-seeh>
- 195 European Commission, EU Single Market Scoreboard 2020 – Netherlands.
https://ec.europa.eu/internal_market/scoreboard/performance_by_member_state/nl/index_en.htm

Country Fact Sheet Netherlands

196 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
197 European Commission, EU Single Market Scoreboard 2020 – Netherlands.
https://ec.europa.eu/internal_market/scoreboard/performance_by_member_state/nl/index_en.htm
198 Ibidem.
199 As the EU-27 average data was not available, the EU-28 average was used for comparative purpose.
200 2019 SBA Fact Sheet - Netherlands. <https://ec.europa.eu/docsroom/documents/38662/attachments/21/translations/en/renditions/native>
201 GAN anti-corruption portal, 2017. <https://www.ganintegrity.com/portal/country-profiles/netherlands/>
202 European Commission, Country Semester Report- The Netherlands 2020, February 2020. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020SC0518&from=EN>
203 Web platform: www.hulpbijbexit.nl
204 European Commission, 2018 SBA Fact Sheet Netherlands. <https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review/>
205 World Economic Forum, The Global Competitiveness Report 2019.
http://www3.weforum.org/docs/WEF_TheGlobalCompetitivenessReport2019.pdf
206 Ibidem.
207 Inward FATS describe the overall activity of foreign affiliates resident in the compiling economy. A foreign affiliate within the terms of inward FATS is an enterprise resident in the compiling country over which an institutional unit not resident in the compiling country has control.
208 Data unavailable for subsequent years.
209 2019 SBA Fact Sheet - Netherlands. <https://ec.europa.eu/docsroom/documents/38662/attachments/21/translations/en/renditions/native>
210 European Commission, 2017 SBA Fact Sheet Netherlands,
<http://ec.europa.eu/DocsRoom/documents/26562/attachments/22/translations/en/renditions/native>
211 Government of the Netherlands, Export Credit Insurance (ECI). <https://www.government.nl/topics/enterprise-and-innovation/contents/excport-credit-insurances-eci>
212 Internationaal Ondernemen, <http://www.internationaalondernemen.nl/nl>
213 Focus Economics- Netherlands Economic Outlook, 01 September 2020. <https://www.focus-economics.com/countries/netherlands>
214 The Netherlands: Again amongst the quickest growing countries of the Eurozone, December 2019.
<https://economics.rabobank.com/publications/2019/december/the-netherlands-amongst-quickest-growing-countries/>