European Construction Sector Observatory

Country profile Finland

March 2018
In a nutshell

Following a continuous decline since 2011, Finland’s GDP is picking up and reached EUR 189.6 billion in 2016, which represents a 1.4% increase since 2015 (EUR 187.1 billion). The GDP is expected to continue growing in the next two years particularly driven by construction investment leading to a solid export performance. However, certain measures need to be taken to cope with the ageing population, a stagnant factor productivity and important private and public debt. Such measures should therefore aim at providing a conducive environment to boost productivity, private consumption, investments and innovation.

Unemployment figures reflect a tendency towards lagging long-term unemployment, which indicates a growing need for better targeted labour market policies and more vocational training and learning opportunity available. Moreover, the increasing rate of net migration should urge Finland to achieve a higher employment rate for the coming years. Indeed, immigration number have been rapidly increasing over the past years, from 25,636 in 2010 to 31,507 in 2014, although it dropped to 28,746 in 2015. Boosting employment becomes even more relevant when it comes to counteract the working age population declines. The population aged of over 65 is expected to grow by 10% by 2020.

Several factors are currently driving the demand for residential properties. First, the number of households in Finland has experienced a steady 5.1% increment over 2010-2016, from 2.51 million to 2.64 million. Moreover, the share of the population living in cities and greater cities has been increasing continuously, from 55% in 2010 to 58% in 2014. Urbanisation is expected to increase considerably over the next decade, thus creating the need for additional dwellings.

Finland is recognised as a leader in eco-innovation, ranking second in the 2016 Eco-innovation index (score of 137), behind Luxembourg and Germany, respectively scoring 139 and 140, and above the EU average (100). Indeed, over 40% of the Finnish public R&D funding goes into the energy and environment sector, and over 30% of public R&D investments are made in cleantech. Total R&D spending on energy technologies amounted to nearly 0.12% of GDP in 2014, the highest among OECD countries, with renewables and energy efficiency being the main focus. The private sector is also an important contributor, accounting for around 70% of total energy R&D expenditure.
Finland is recognised as a leader in eco-innovation, ranking second in the 2016 Eco-innovation index. Over 40% of the Finnish public R&D funding goes into the energy and environment sector, and over 30% of public R&D investments are made in cleantech.
The number of enterprises in the broad construction sector in Finland totalled 82,470 in 2016 (Figure 1), with the construction sub-sector (NACE F) accounting for 54.1% of the total firms. Overall, the number of enterprises in the broad construction sector increased by 16.6% between 2010 and 2016 mostly driven by the 54.9% growth in real estate sub-sector companies. Conversely, the number of companies in the construction and architectural and engineering sub-sectors remained stable, whereas the manufacturing sub-sectors experienced a 12.5% decline. Production in the construction of buildings has been on the road to recovery since 2010, exceeding the 2010 level by 13.6% in 2016 (Figure 2). Similarly, production in civil engineering has been steadily increasing over the same years, surpassing its 2010 level by 17.7% in 2016.

The total added value of the broad construction sector amounted to EUR 19.1 billion in 2016, with the construction sub-sector contributing to 54.4% of the total (EUR 10.4 billion), followed by real estate activities (EUR 4.4 billion, i.e. 23.1% of the total), architectural and engineering activities (EUR 2.6 billion, i.e. 13.4%) and manufacturing (EUR 1.8 billion, i.e. 9.2%) (Figure 3). The share of gross value added of the broad construction sector in the GDP reached 18.3% in 2014, with real estate activities having the largest contribution (Figure 4).
Macroeconomic Indicators

Following a continuous decline since 2011, Finland’s GDP is picking up reaching EUR 189.6 billion in 2016, which represents a 1.4% increase since 2015 (EUR 187.1 billion). The GDP is expected to continue growing in the next two years particularly driven by construction investment leading to solid export performance. However certain measures need to be undertaken to cope with the ageing population, a stagnant factor productivity and important private and public debt. Such measures should therefore aim at providing a conducive environment to boost productivity private consumption, investments and innovation.

Inflation has shown a deflationary trend, reflecting the lack of demand in the economy. After peaking at 3.3% in 2011, it has experienced a continuous decline and reached a record low in 2015, falling at -0.2%, due to drops in oil and food prices. However, in 2016, Finland’s inflation rate rose back to a positive level of 0.4%.

Together with France, Finland recorded the highest general government expenditure revenues in 2016, accounting for 56.1% of GDP, far above the EU-28 average of 48%. The general government gross debt amounted to 63.6%, slightly more than in 2015 (63.7%) and 12.5% more than in 2013 (56.5%), but far below the EU-28 average of 83.5%.

With respect to unemployment, the average unemployment rate reached 8.8% in 2016, slightly higher than the EU-28 average of 8.6%. This is a modest increase compared to 2010 (8.4%), but a serious one compared to 2015 (9.4%). Due to the crisis, youth unemployment (below age of 25) has remained steady since 2010 (21.4%) and reached 20.1% in 2016, a 10.3% improvement compared to 2015 (22.4%). Unemployment figures reflect a tendency towards lagging long-term unemployment, which indicates a growing need for better targeted labour market policies and more vocational training and learning opportunity available. Moreover, the increasing rate of net migration should urge even more Finland to achieve a higher employment rate for the coming years. Indeed, immigration number have been rapidly increasing over the past years, from 25,636 in 2010 to 31,507 in 2014, although it dropped to 28,746 in 2015. Boosting employment becomes even more relevant when it comes to counteract the working age population declines. The population aged of over 65 is expected to grow by 10% by 2020.

Loans to non-financial corporations in the general economy have shown a generally increasing trend since 2010, growing from EUR 57.5 billion to 76.8 billion in 2016 (+33.6%). In addition, Finland ranks 4th out of 140 economies in terms of financial market development, according to the 2017-2018 Global Competitiveness Report, with outstanding rankings in soundness of banks (1st), regulation of securities exchanges (2nd), availability and affordability of financial services (3rd) and venture capital availability (3rd), and easiness to access loans (4th). Regarding financing through local equity market, Finland rank 21st, and equity remains the main source of financing for Finnish companies. In terms of alternative forms of financing, Finland recently adopted the Crowdfunding Act (September 2016) which will regulate to growing market which roughly doubled to about 150 million in 2016.

Finland ranks 4th out of 140 economies in terms of financial market development, according to the 2017-2018 Global Competitiveness Report.
SMEs’ access to finance shows a solid recovery in 2010-2015, following a deterioration since the crisis where SME lending dropped by 43.6%, due to a combination of tighter credit conditions and insolvency issues. From 2014 to 2015, lending to SMEs increased by 26% and SME sector’s expansion is expected to continue in 2015-2017 particularly driven by the ICT service industries.

Although strong efforts supporting SME policy priorities have been made, small issues remain, especially in reducing the size of lots in public procurement and shrinking the review proceedings periods. Public funding to SMEs is supported by Finnvera, the government-owned company, which offers financing for the set-up, growth and internationalisation of companies (see TO 5 - International competitiveness). Furthermore, in May 2016, Finland adopted the SME Initiative, the joint financial instrument of the European Commission, the European Investment Bank (EIB) and the European Investment Fund (EIF). The programme will benefit from EUR 40 million and will provide guarantees to financial intermediaries that grant loans to SMEs. The guarantees are expected to unlock over EUR 360 million of fresh loans for Finnish companies. In addition, the EIF has committed EUR 170 million in equity and EUR 75 million in guarantees between 2011 and 2016, with expected mobilised resources of EUR 650 million and EUR 150 million, respectively.

In May 2016, Finland adopted the SME Initiative, the joint financial instrument of the European Commission, the European Investment Bank (EIB) and the European Investment Fund (EIF).
3

Key economic drivers of the construction sector

Productivity
Overall, despite some fluctuations, labour productivity in the Finnish broad construction sector has slightly increased from EUR 59,164 in 2010 to EUR 60,438 in 2014 (+2.2%). This was primarily driven by real estate activities, which reported the highest productivity levels among the four sub-sectors, amounting to EUR 187,125 in 2016, even though they experienced a decline of 16.8% from 2012 to 2014 (Figure 5).

![Labour productivity in the broad construction sector (euros)](image)

The growth of labour productivity in the manufacturing, narrow construction, and architectural and engineering activities sub-sectors has remained small but steady over the same years (11.5%, 10.2%, and 7.0%, respectively), despite a small drop in 2013 experienced by the three sub-sectors.

Specifically, productivity in the manufacturing sub-sector experienced a 3.4% increase from 2010 to 2012 (reaching a value of EUR 49,725 in 2012), subsequently dropped in 2013 to a level of EUR 48,077, and finally recovered in 2014 and is trending upward since then to reach EUR 53,635 in 2016. Similarly, productivity in the construction sub-sector rose by 10% between 2010 and 2012, reaching its highest level (EUR 51,600), then slightly declined in 2013 to a value of EUR 48,700, and finally picked up in 2014 and rose to reach EUR 51,693 in 2016. Likewise, after a 10.5% increase from 2010 to 2012, reaching its highest level in 2012 (EUR 58,000), labour productivity in architectural and engineering activities slightly declined in 2013, but increased to EUR 57,275 in 2016.

Profitability
The total turnover of the broad construction industry in 2016 amounted to EUR 51.4 billion, a 19.1% increase compared to 2010. The construction sub-sector accounted for 63.3% of the total turnover, followed by real estate activities (15.1%), manufacturing (11.4%) and architectural and engineering activities (10.2%). The gross operating surplus of the broad construction sector amounted to EUR 6.9 billion in 2014, 2.8% higher than the previous year, and 10.4% above the 2010 level. The gross operating rate of the broad construction sector, which gives an indication of the sector’s profitability, was 14.7% in 2014, 0.1 percentage point lower than 2010 (14.8%). In addition, construction costs have experienced an ever increasing trend, with the construction cost index rising by 9.0% over 2010-2016 (Figure 6), due to increases in both labour costs and particularly input prices for materials (+8.1%). This has had negative repercussions on the profitability of the sector, as well as on the supply of dwellings (see Access to housing).

![Total turnover of the broad construction sector](image)

↑ 19.1%
Employment

In 2016, the broad construction sector employed 301,966 people. Between 2010 and 2016, the number of persons employed in the broad construction sector increased by 13.1%. The construction sub-sector employed 66.6% of the total construction workforce in 2016. Overall, since 2010, the number of persons employed in the construction sub-sector increased by 16.2%. Within the construction sub-sector, activities in construction of buildings saw a particular growth, with the number of people employed increasing by 19.1% from 2010 to 2016.

The number of self-employed workers in the construction sub-sector has remained relatively constant over 2010-2016, averaging at 39,729, and representing 14% of all the self-employed in the general economy in 2016.

Moreover, there has been a 33.3% increase in part-time employment in the construction sub-sector, from 9,600 workers in 2010 to 12,800 in 2016. In 2014, SMEs employed 79.71% of the entire workforce of the broad construction sector, although this share is lower than in other EU countries, where it often exceeds 90%.

Business confidence

Business confidence in the overall economy has generally shown a deterioration over the last few years, with the exception of the construction confidence index which, though still negative, has considerably improved from -18.8 in 2010 to -3.8 in 2016. However, this is still less than the highest level of -1.3 in 2011, but better than in 2013 and 2014 (-24.5 and -26.7). In contrast, industry confidence has significantly dropped since 2010, reaching a first negative record at -9.2 in 2012, and remaining negative the following years, to reach -7.2 in 2016. Concerning the consumer confidence index, it has remained positive since 2010, but experienced a severe decline in 2012 when it reached 4.7. It slowly recovered the following years to reach 14.8 in 2016. The investment ratio on the other hand, has remained perfectly stable since 2010 until 2016 at a level of 22% with slightly lower level in 2014 and 2015 at 21%. On the opposite, investment per worker declined by 20% between 2010 and 2014, from EUR 107,506 to EUR 86,436.

According to the Confederation of Finnish Construction Industries (Rakennusteollisuus - RT), the construction sector is developing positively and is finally expected to grow again.
Domestic sales

The ranking of the most domestically sold construction products in Finland has remained relatively constant since 2010, with the exception of “Ready-mixed concrete”, being replaced by “Builders’ joinery and carpentry of wood”. The value of domestic sales has seen some decreases between 2010 and 2015, particularly for “Prefabricated wooden buildings” (-37.6%) and “Other structures and parts of structures” (-19.6%). Similarly, but to a lesser extent, the value of domestic sales for “Windows, French windows, etc.” declined between 2010 and 2015 (-11%). Conversely, “Prefabricated structural components” and “Builders’ joinery and carpentry of wood” have increased their domestic sale values by 19.0% and 8.0%, respectively. The top 5 most domestically sold construction products are presented in Table 1, including a comparison with the most sold in the EU-28. These represented 61.6% of total domestic construction product sales in 2015.

Export of construction-related products and services

The ranking of the most exported construction products has remained relatively stable since 2010, with the exception of “Prefabricated wooden buildings”, which was replaced by “Other structures”. The top 5 most exported construction products from Finland and the EU-28 are summarised in Table 2. Together, these made up 77.4% of all construction products exports in 2015.
In terms of cross-border provision of construction services, Finland exported EUR 1,850 million worldwide in 2012. Specifically, exports to the EU-28 increased by 77.6% over 2008-2012, reaching EUR 357 million. However, the share of exports to the EU-28 in total construction service exports declined to 19.3% in 2012, compared to 22.3% in 2008, signalling an increasing focus on extra-EU markets. Indeed, exports of construction services to countries outside the EU-28 increased by 113.9% in 2008-2012, from EUR 698 million to EUR 1,493 million. In parallel, Finland imported a total of EUR 878 million in construction services in 2012, 41.9% of which from the EU-28, thus achieving a trade surplus of EUR 972 million.

Access to housing

Several factors are currently driving the demand for residential properties. First, the number of households in Finland has experienced a steady 5.1% increment over 2010-2016, from 2.51 million to 2.64 million. Moreover, the share of the population living in cities and greater cities has been increasing continuously, from 55% in 2010 to 58% in 2014. Urbanisation is expected to increase considerably over the next decade, thus creating the need for additional dwellings. Secondly, the mean equivalised net income has experienced an 11.5% increase since 2010, reaching EUR 26,240 in 2015, leading to a higher household purchasing power. Thirdly, mortgage interest rates have been declining considerably since 2011, and reached an historic low of 1.13% in 2016 (Figure 8). As a result, housing loans to households have seen a continuous growth. Indeed, total outstanding residential loans have increased by 19.8%, from EUR 76.7 billion in 2010 to EUR 91.9 billion in 2016.

Access to finance in the construction sector

Loans to companies in the construction and real estate sub-sectors have experienced a general increasing trend over the last few years. Indeed, the stock of loans has grown by 53.7%, from EUR 27.3 billion in 2010 to EUR 41.9 billion in 2016. However, according to the Business Tendency Survey, financing difficulties were reported to be one of the major obstacles to operations by 12% of respondents in the construction sector. According to the Mortgage Society of Finland, loans to housing companies accounted for 59% of the loan portfolio in 2016. A housing company, also known as housing cooperative, is a legal entity that owns one or more residential buildings and apartments. When buying an apartment, buyers actually purchase shares of the housing company, proportional to the size of the apartment. The shareholders are thus joint owners of the housing company. The fact that housing companies draw loans for the construction and renovation of the residential building stock makes lending less risky from the point of view of financial institutions, since it is the housing corporation that is liable for the loan, as opposed to an individual household.

However, households are responsible for repaying the monthly instalments of the housing corporation debt to the housing corporation. Thus, should a household be unable to do so, legal action (e.g. repossession of the apartment) can be taken by the other owners of the corporation.

According to the Mortgage Society of Finland, loans to housing companies accounted for 59% of the loan portfolio in 2016.
2016 (Figure 9), although the trend has stabilised over last few years. In order to tackle indebtedness, avoid credit-driven increases in house prices and prevent a housing bubble, Finland’s Financial Supervisory Authority (Finanssivalvonta – FIN-FSA) introduced a maximum loan-to-value (LTV) ratio for housing loans in July 2016, limiting the LTV to 90% (95% for first-home purchases) of the value of the property.

Additional measures adopted to constrain the increase in households’ debt were implemented in July 2017 and include a 10% minimum average risk weight for housing loans for banks having adopted the Internal Ratings Based Approach (IRBA), and a 30% reduction of tax deductibility of interest payments on housing loans (from 75% in 2014 to 45% in 2017). Both measures are expected to reduce the demand for housing loans.

The housing shortage in the Helsinki metropolitan area is estimated at 20,000, requiring up to 14,000 dwellings to be built yearly to address this deficit and respond to the increasing urbanisation rate. Countrywide, more than 760,000 dwellings would need to be built by 2040, of which about 365,000 in the Helsinki region alone.

Despite the demand, the Finnish housing market is characterised by a sluggish supply. This is due to several factors, such as the elevated construction costs (see Profitability) and the limited availability of building land, particularly in urban areas with significant population growth. Moreover, planning regulations are not always aligned with market demand. For instance, planning regulations in Helsinki impose requirements on the size of dwellings towards the construction of larger family homes, as opposed to smaller apartments, which are more in demand. As a result, according to the Finnish Chamber of Commerce (Kauppakamari), smaller one-bedroom apartments are not readily available on the market, thus failing to satisfy the demand, whereas larger and more expensive new family homes remain unsold. Consequently, the housing shortage in the Helsinki metropolitan area is estimated at 20,000, requiring up to 14,000 dwellings to be built yearly to address this deficit and respond to the increasing urbanisation rate. Countrywide, more than 760,000 dwellings would need to be built by 2040, of which about 365,000 in the Helsinki region alone.

Despite this need, average housing completions after the mid-1990s have been lower than during the 1980s and early 1990s. Thus, since the peak in 1990, when completions reached about 65,000, dwelling completions fell to almost 31,000 in 2008 (-52%), to 29,233 in 2014 (-55%) and to 28,622 in 2015 (-56%). This has been the case despite the 17.8% increase in building permits and the 34.7% increase in building starts over 2008-2015.

Infrastructure

Finland ranks 26th out of 137 in terms of its infrastructure, according to the 2017-2018 Global Competitiveness Report. In particular, it performs best in terms of the quality of its air transport and port infrastructure (5th), followed by railroad infrastructure (6th), and overall infrastructure quality (8th). It scores slightly lower for the quality of electricity supply (9th) and in the quality of its roads (21th). To further strengthen transport infrastructure and address the current maintenance backlog, the Finnish government has foreseen important investments over the next years (see TO 1 - Investment conditions and volumes).
4

Key issues and barriers in the construction sector

Company failure

The business demography in the broad construction sector has shown similar trends across most sub-sectors, with the number of company births and deaths generally decreasing between 2010 and 2014, indicating a progressive stabilisation of the demography after the crisis. Namely, company births in the construction sub-sector dropped by 20.3%, from 4,276 in 2010 to 3,409 in 2014. The number of deaths also declined (-46.7%), from 3,767 to 2,006. Similarly, the real estate activities and architectural and engineering activities sub-sectors both experienced a general decline in company births and company deaths. This decline was more important for real estate activities, with a 31.4% drop in company births (from 4,585 in 2010 to 3,151 in 2014) and a 39.9% decline in deaths (from 2,609 to 1,581 for the same years). Architectural and engineering activities experienced a less severe decline, 16.5% drop in company births (from 843 to 704) and a 26.5% drop in deaths (from 773 to 568).

As for bankruptcies in the construction sector, these experienced a continuous decline since 2010, dropping by 35.6% between 2010 and 2016, from 739 to 476, except in 2011 and 2012 where it picked up at 763 and 760 respectively. This general decline is due to important reduction of companies bankruptcies in the building construction, construction of residential and non-residential buildings, specialized construction activities, and demolition of buildings and construction and preparation of construction site sub-sectors.

Trade credit

According to the Survey on Access to Finance of Enterprises (SAFE), considerable improvements in the availability of external financing and specifically for trade credit financing are expected for euro area SMEs, regardless of their size.

In addition, 31% of these SMEs reported that trade credit is a relevant source of financing for them over the last year (October 2016 - April 2017), compared to other form of external financing. However only 8% of euro area SMEs declared having an actual need for trade credit compared to 7% the previous year. This is explained by sufficient internal funds, suggesting that fear of possible rejection is not common among Finnish SMEs (only 2% of respondents in 2016, 82% of SMEs that applied for trade credit received all the financing requested, considerably above the EU-28 average of 68% and the highest among the surveyed countries.

Late payment

Finland has never been significantly plagued by late payments from public administrations. Indeed, the implicit financial costs associated with payment delays in 2012 were estimated to amount to less than 0.05% of GDP, almost negligible when compared to countries such as Greece (0.19%). Finland boasts a very strict regulation to fight late payments, which predates the transposition of the 2011 Late Payments Directive (LPD), and one of the shortest average payment duration in the EU for public administration-to-business payments (PA2B). Indeed, Finland, together with Estonia and Germany, is the only Member State that complies with the 30-day limit set for PA2B transactions, with an average payment duration of 23 days in 2016.

Payment practices in Finland are also prompt in business-to-business (B2B) transactions, with payment terms set at 18 days and actually taking on average 23 days. The Finnish Parliament amended the Act of Payment Terms in Commercial Relations, the national legislation transposing the LPD, to shorten the maximum payment period for B2B transactions from 60 to 30 days, unless otherwise stated in the contract. Nevertheless, there have been signs of deterioration and pessimism, with 64% of Finnish companies reporting that a main cause for late payments from their customers in 2016 is that they are inten-
The number of job vacancies in the construction sub-sector experienced a 19.5% increase since 2009. These grew from 1,934 to 2,312 in 2015, with a peak of 2,809 in 2012, suggesting the difficulties in recruiting suitably skilled workforce. However, the number of tertiary students in engineering, manufacturing and construction remains good (9,634) but smaller than in 2012 (10,706). This is due to a decline both in engineering and manufacturing and construction, fairly compensated by an increase of 20.7%, from 2,145 to 2,590, between 2010 and 2015 in architecture and building.

Moreover, adult participation in education and training in the broad construction sector is high, and has been increasing since 2010. In the construction sub-sector, this participation rate went from 16.8% in 2010 to 21.2% in 2016. In real estate activities the participation rate is overall higher, but is prompt to variations. Indeed, this rate dropped from 30.5% in 2010 to 23.8% in 2014, picked up at 31.8% in 2015 and dropped again to 27.9% in 2016.

### Time and cost of obtaining building permits and licenses

According to the World Bank’s Doing Business 2017 Report, Finlandia ranks 103rd in terms of ‘dealing with construction permits’. Completing administrative formalities to build a warehouse requires 10 procedures, below the OECD high-income average of 121, but takes 286 days, well above the OECD high-income average of 152.1. Furthermore, the cost of building a warehouse accounts for 0.1% of its value, compared to the average of 1.6% (Table 3). Importantly, since October 2015, the Building Act allows shorter procedures to receive building permits. However, this applies only to large-scale investments and infrastructure projects.

### Skills shortage

Finland boasts a very strict regulation to fight late payments, which predate the transposition of the 2011 Late Payments Directive (LPD), and one of the shortest average payment duration in the EU for public administration-to-business payments (PA2B).

The risk payment index was 0.41 in 2016, placing Finland above average in the category of good payers.

Financial, compared to the EU average of 55%. However, the first cause of late payment remains financial difficulties of debtors at a rate of 70% as reported by Finnish companies, followed by administrative inefficiency of customers at 55%. The time to complete associated costs

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Time to complete</th>
<th>Associated costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain building permit maps and extract from the Real Estate Office</td>
<td>12 days</td>
<td>EUR 170</td>
</tr>
<tr>
<td>Obtain official opinion on the connection of the wastewater drain and water pipeline</td>
<td>7 days</td>
<td>no charge</td>
</tr>
<tr>
<td>Schedule start-up meeting</td>
<td>7 days</td>
<td>no charge</td>
</tr>
<tr>
<td>Obtain extract from the Trade Register</td>
<td>1 day</td>
<td>EUR 21</td>
</tr>
<tr>
<td>Obtain report on the height of the intended construction</td>
<td>0.5 days</td>
<td>no charge</td>
</tr>
</tbody>
</table>


Moreover, adult participation in education and training in the broad construction sector is high, and has been increasing since 2010. In the construction sub-sector, this participation rate went from 16.8% in 2010 to 21.2% in 2016. In real estate activities the participation rate is overall higher, but is prompt to variations. Indeed, this rate dropped from 30.5% in 2010 to 23.8% in 2014, picked up at 31.8% in 2015 and dropped again to 27.9% in 2016.
However, according to the Confederation of Finnish Construction Industries, there is a mismatch between labour supply and demand in the Finnish construction sector. This is further exacerbated by the fact that the unemployed workforce, which could constitute a resource for the sector, is not located where the bulk of the construction activity is concentrated, i.e. in urban areas. Moreover, RT expects the demand for qualified labour in the construction sector to increase considerably as a result of the growing ageing workforce retiring, and the younger age groups shrinking. Indeed, it is estimated that up to 45% of the construction sector’s workforce will have retired by 2020.

Job vacancies in the construction sub-sector

<table>
<thead>
<tr>
<th>Year</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>1,934</td>
</tr>
<tr>
<td>2015</td>
<td>2,312</td>
</tr>
</tbody>
</table>

Demand is particularly high for construction design and management experts, due to the reduction of design training following a recession in the 1990s. Indeed, RT foresees that demand will be urgent as early as within the next five years, and the supply is already significantly below demand in many areas of the country. Moreover, given the increasingly tighter requirements for energy efficiency, and considering Finland’s ambition to keep its position as a global leader in sustainable construction, skilled workers in heat insulation and air tightness, moisture control, RES (renewable energy systems) installations and HPAC (Heating, Plumbing and Air Conditioning) installations will be needed.

Thus, the demand for labour is currently beginning to be addressed by employing foreign workers (see TO 2 – Skills). Up to 30,000 foreign workers are already employed in the construction sector, according to RT. In the Uusimaa region for instance, over 30% of the skilled workforce is foreign.

**Sector & sub-sector specific issues**

**Material efficiency and waste management**

In 2014, Finland reported a total amount of 96.0 million tonnes of waste generated by economic activities and households. Of these, 17.0 million tonnes came from construction and demolition (C&D) waste, far below the EU-28 average of 34.7 million tonnes, slightly more than in 2012 (16.0 million), and 30.9% less compared to 2010 (24.6 million tonnes). A large share of the waste generated is characterised by from mineral wastes while hazardous waste amounted to around 10.5% of Finland’s total waste.

C&D waste in Finland is regulated by several acts and decrees, the main ones being the Government decree on waste 179/2012 and the Government Decree 591/2006 concerning the recovery of certain wastes in earth construction. The former addresses the reduction of the quantity and harmfulness of construction and demolition waste. Moreover, it provides for the separate collection and recovery of C&D waste so as to reuse and reclaim the waste, according to the Waste Act 646/2011. The target is to recover a minimum of 70% by weight of C&D waste by means other than energy recovery or reprocessing into fuel. Considerable innovation activity is being carried out by private companies in this respect, as supported by public funds (see Innovation in the construction sector).

**Climate and energy**

**Emissions of greenhouse gases** (carbon monoxide and dioxide, methane and nitrous oxides) from activities related to construction and real estate in Finland amounted to a total of 2,138,986 and 4,829,214 million tonnes in 2013 and 2014, respectively. This constitutes an increase of 125.8%.

Emissions in the construction sub-sector have decreased by 17.7% during the 2010-2014 period and by 6.3% from 2013 to 2014. Similarly but even more pronounced, the real estate sub-sector experienced a decline of 30.5% over the 2010-2014 period and a drop of 3.7% from 2013 to 2014.
Innovation in the construction sector

Innovation performance

Finland is classified as an Innovation Leader, according to the European Innovation Scoreboard 2017, with an overall performance in 2016 in terms of innovation and R&D of 130.9% relative to the EU-28 average of 102. In comparison to the 2010 level, Finland’s innovation and R&D performance in 2016 has decreased by 5.1%. Finland’s strengths lie in its human resources, innovation-friendly environment and attractive research systems.

Noticeable performances relative to the EU include a sizeable increase of international scientific co-publications (+188.1% in 2016 compared to 2010), foreign doctorate students, broadband penetration, opportunity-driven entrepreneurship, life-long learning and trademark applications that respectively improved by 45.1%, 44.4%, 38.6%, 35.8%, and 37.3% during the same period.

However, there has been a decrease in the performance relative to R&D expenditures both in the public sector (-17.8%) where venture capital investments have dropped by 54.1% from 2010 to 2016, and the private sector (-53.2%). Nevertheless, the performance relative to these indicators remains above the EU average.

In parallel, the total R&D personnel (full-time equivalents – FTE) in the broad construction sector broadly reflects this situation, with its levels showing some decline since 2010, except for the narrow construction sub-sector (Figure 10). Indeed, although being the highest among the sub-sectors, BERD in the professional, scientific and technical activities sub-sector experienced a 24.5% drop over 2010-2014, from 1,678 to 1,267, but was still the highest among sub-sectors. Conversely, total FTE in the construction sub-sector grew by 13.6% in 2010-2014, rising from a lowest of 394 in 2013 which was 9% below the 2010 level (433). Real estate activities reported the lowest FTE, in line with the BERD, which increased from 9 in 2010 to 10 in 2012. With respect to the average number of construction related patent applications, it fluctuated a lot during 2010-2016. Indeed, from 2010 to 2012, the average number of construction related patent applications fell from 79 to 71, further increased to 81 in 2013, and dropped again in 2014 and 2015 at a lowest of 67. It peaked up again in 2016 to reach its initial 2010 level of 79.

Moreover, two Finnish Construction & Materials firms rank within the top 1,000 EU companies by R&D (industrial sector ICB-3D), according to the 2016 EU R&D Scoreboard.

Business enterprise R&D expenditure (BERD) in the broad construction sector broadly reflects this situation, with its levels showing some decline since 2010, except for the narrow construction sub-sector (Figure 10). Indeed, although being the highest among the sub-sectors, BERD in the professional, scientific and technical activities sub-sector dropped by 25.7% in 2010-2014, from EUR 171.4 million to EUR 127.4 million. After improving in 2012 to EUR 174.7 million, it dropped 2013 and further in 2014 to the lowest level of EUR 127.4 million. On the contrary, BERD in the narrow construction sub-sector grew by 37.9% in 2010-2014, with a 2014 peak of EUR 79.7 million from the 2013 level of EUR 45.6 million which was below the 2010 level. Real estate activities displayed a 27.0% increase in BERD over 2010-2012, from EUR 2.3 million to EUR 2.9 million, although it is the lowest among the three sub-sectors.

Figure 10: Business enterprise R&D expenditure per construction sub-sector in Finland over 2010-2014\(\text{Eur m}\)

Eco-innovation and digitalisation

Finland is recognised as a leader in eco-innovation, ranking second in the 2016 Eco-innovation index (score of 137), behind Luxembourg and Germany, respectively scoring 139 and 140, and above the EU average (100). Indeed, over 40% of the Finnish public R&D funding goes into the energy and environment sector, and over 30% of public R&D investments are made in cleantech.

Total R&D spending on energy technologies amounted to nearly 0.12% of GDP in 2014, the highest among OECD countries, with renewables and energy efficiency being the main focus. The private sector is also an important contributor, accounting for around 70% of total energy R&D expenditure.

Within this context, eco-innovation and intelligent construction are a specific priority of the Finnish government, as stated in the ‘Action plan for research and innovation policy’. Recently, the Finnish government added circular economy as another main priority of its Strategic Programme from 2016 and onwards. These are supported by a series of public bodies, such as Tekes (The Finnish Funding Agency for Technology and Innovation), VTT (Technical Research Centre of Finland) and the Academy of Finland, which allocate research funding through various programmes and schemes. For instance, TEKES’ "Green Growth – Towards a Sustainable Future" programme funds companies with growth potential in the area of energy and material-efficiency, bioeconomy and biomaterials, recycling and waste management. As an example, the programme has supported the development of an innovative method for processing construction waste materials into re-composite raw materials, aiming to achieve a 100% recycling rate for C&D waste.

Moreover, Finland is active in the promotion of Building Information Modelling (BIM). For instance, VTT coordinates the research project ecobim, with the aim to develop a sustainable construction business model based on life-cycle assessment tools and BIM, so as to support paradigm change in eco-innovation. Furthermore, the collaboration forum BuildingSMART Finland was established to disseminate information on BIM and support its member companies in implementing BIM-based processes. Granlund Finnish company, which has been a member of BuildingSMART forum since 1996, has been playing an active role in harmonising BIM processes and requirements, and developing BIM and IFC standards. Recently, those standards and requirements have been translated into other languages in order to facilitate their transfer and reuse in other MS.
National & Regional Policy & Regulatory Framework

Policy schemes

Housing policy in Finland is implemented by the Housing Finance and Development Centre of Finland (Asumisen rahoitus-ja kehittämiskeskus – ARA), which belongs to the Ministry of the Environment. It provides subsidies, grants and guarantees for the new construction, renovation and purchase of dwellings, as well as building infrastructure in new residential areas, the development of residential areas and housing advice activities.

For instance, for 2012–2015, a maximum of EUR 600,000 per year was allocated from the State Housing Fund for housing advice activities, granting subsidies of up to 20% of the costs to eligible municipalities and organisations. For 2017, EUR 900,000 are available.

Such subsidies aim to support programmes offering advice to address long-term homelessness, immigrant housing, and housing for vulnerable categories (e.g. people recovering from mental illness, young people at risk of social exclusion, families and old people). Furthermore, dedicated investment subsidies for special-needs groups are in place to increase the supply of affordable rental housing suitable for such vulnerable groups. The maximum amount of the subsidy increases with the number of interventions required, and could cover 10%, 25%, 40% or 50% of approved investment costs.

Moreover, ARA provides subsidies for the removal of accessibility barriers, improving the accessibility of residential buildings for elderly people or people with reduced mobility. Eligible interventions include the construction of ramps, widening of front doors and construction of railings. These accessibility subsidies normally cover up to 50% of the approved renovation costs, but can cover up to 70% if the applicant is a veteran or an elderly or disabled person who has to immediately move out of their home because it is not accessible or the social services needed cannot be provided.

Subsidies are also available for the demolition of an ARA-constructed rental building. Owners of the rental building must show considerable financial difficulties and be unable to absorb all of the costs incurred from demolition activities in order to request a subsidy that will cover maximum 70% of the demolition costs.

These subsidies constitute the main funding pillars of the Housing Development Programme for Older People for 2013–2017, which further highlights the importance that Finland places on the adaptation of residential construction to social issues, namely the ageing population. The programme focuses on the renovation of residential buildings, namely accessibility repairs and installation of lifts, so as to reach a target of 1 million accessible dwellings by 2030.

ARA also grants municipalities, local authorities and eligible corporations state guarantees on loans and payment of interest subsidies for the construction and purchase of social housing. The interest subsidy covers up to 90-95% (80% in the case of acquisition) of building costs and price of the land. Tenants for such social rental dwellings are selected on the basis their social and financial conditions. Homeless applicants and others in urgent need of housing are priorities. Finally, ARA has an annual budget of EUR 700,000 to support research and development activities in the field of housing. Areas of interest in this respect include the development of housing solutions for special-needs groups, sustainable and energy-efficient buildings, use of industrial technologies (prefabricated modules), and the redevelopment of the old building stock.

ARA has an annual budget of EUR 700,000 to support research and development activities in the field of housing.
Insurance and liability related regulations

In Finland, the acquisition of statutory insurances is under the responsibility of employers carrying out construction work. These include earnings-related pension, health insurance pension, unemployment insurance and accident insurance. The YSE 1998 General terms for building contracts (YSE 1998 conditions) require the main contractor to be insured for both the construction works and the materials and supplies acquired for the construction activities, to cover the costs related to the repair of defects or the indemnity to the owner should the defects not be reparable. Moreover, it is also common for contractors to take out additional insurances, such as loss-of-profits insurance, liability insurance or legal expenses insurance. In terms of duration of liability, the YSE 1998 conditions provide for a 2-year guarantee period for buildings, during which the contractor is obliged to repair defects. Following the expiry of the guarantee period, the contractor remains liable for 10 years after handover in case of defects resulting from gross negligence, uncompleted work, unsatisfactory quality or latent defects.

The Housing Transaction Act 843/1994 (Asuntokauppalaki), which takes into account the protection of both housing companies and consumers (i.e. buyers of housing shares), also shapes the insurance and liability framework. It requires that security is lodged to protect against interrupted construction or a defect in the construction within the seller’s liability. Security provisions should cover dwellings in the construction stage and post-completion stage, thus ensuring that the construction and the housing transaction contracts are fulfilled. The security that covers the construction phase takes the form of a bank deposit or a bank guarantee, amounts to at least 5% of the overall construction and repair price specified in the construction project, and lasts at least 3 months after the approval of the building for use by the municipal authority. The security covering the post-construction stage takes the form of a bank security, corresponds to minimum 2% of the total transaction price of shares sold and lasts at least 15 months after the close of the security for the construction phase. Moreover, the Act requires sellers to arrange for a security against their insolvency, allowing a maximum compensation of 25% of the cost of construction. This needs to be taken out before the start of the sale of apartments, and remains in force for 10 years after the building has been approved for use.

Building regulations

Two main pieces of legislation govern land use, spatial planning and construction activities in Finland. The Land Use and Building Act 123/1999 concerns the use of land areas and building activities conducted on them and aims to create a healthy, safe, comfortable and socially functional living environment. It includes provisions on town planning, municipal building ordinances, plot division, general building requirements and building permits, among others. It also defines some provisions related to carrying out, supervision, inspection and approval of construction works. The Land Use and Building code was amended in 2015 and 2016, with a further amendment foreseen for 2017 (see TO 4 - Single Market).

The National Building Code of Finland contains regulations and guidelines that complement the Land Use and Building Act. The building regulations, which relate to the construction of new buildings, are legally binding and can also be applied to renovation and alteration works under certain conditions. Conversely, building guidelines are not compulsory. The Code’s regulations and guidelines cover general areas (e.g. supervision of construction work, maintenance manual for the care and use of buildings, etc.), aspects related to the strength of the structures, insulation (thermal, sound, etc.), energy management, structural fire safety, general building planning and housing planning and building.
Current Status & National Strategy to meet Construction 2020 Objectives

TO 1 - Investment conditions and volumes

Total investment by the broad construction sector has generally declined since 2010 (Figure 11). Namely, investment by real estate activities dropped by 9.3% in 2010-2015, from EUR 15,377 million to EUR 13,949 million, slightly above its lowest level of 2014 (13,170 million). Conversely, investment by narrow construction activities has recorded a marginal increase for the 2010-2015. Indeed, despite small fluctuations, the 2015 level (EUR 782 million) is higher than the 2010 level of EUR 755 million. Specifically, from 2010 to 2012, investment by narrow construction were rising and reached the highest level for the period (EUR 847 million), further declined in 2013 before peaking up again in 2014 and 2015.

Nevertheless, total inland infrastructure investment as a share of GDP increased from 0.7% in 2010 to 0.9% in 2014, in line with the EU average of 0.8%. In particular, over the period 2010-2014, road and rail investment increased by 27.2% and 65.7%, respectively. Thus, road investment increased from EUR 890 million to EUR 1.13 billion, whereas rail investment grew from EUR 388 million to EUR 643 million. However, Finland has one of the lowest rail densities (17.56 km/km2) in the EU, highlighting the need for additional investment in this sector.

On the contrary, rail infrastructure maintenance decreased by 0.5% over 2010-2014, from EUR 195 million to EUR 194 million, and road infrastructure maintenance declined by 24.1%, from EUR 667 million to EUR 506 million.

Transport infrastructure, and the railway network specifically, is the key focus of Finland’s public investment, with EUR 3.5 billion earmarked for 2016-2022. The main investment areas are the expansion of the long-distance rail network, local public rail transport inside and outside the Helsinki region. Notable projects include the improvement of the Seinäjoki–Oulu line and its branches (total investment of EUR 860 million), the Helsinki–Riihimäki line (EUR 350 million), the Luumäki–Imatra line (EUR 380 million) and the underground suburban rail loop in the centre of Helsinki (EUR 740 million).
Moreover, the Finnish government identified a maintenance backlog in the transport network, estimated at about EUR 2.5 billion. In order to offset the deterioration of the national transport network and reduce the backlog, additional funding of EUR 600 million has been granted for the period 2016–2018 under the ‘Action plan to reduce the maintenance backlog of transport infrastructure 2016–2018’.

Of the total, EUR 35 million will be devoted to digitalisation of the network, and about EUR 39 million euros for smaller interventions, such as pavements of short roads, road drainage improvements and equipment and device repairs. In addition, the Finnish Transport Agency and the Centres for Economic Development, Transport and the Environment (ELY Centres) will perform other maintenance projects, totalling EUR 360 million per year.

Furthermore, an additional EUR 364 million will be allocated to basic transport infrastructure management between 2017 and 2019. Namely, EUR 163 million are dedicated to public roads, EUR 101 million to railways, EUR 30 million to private roads in the form of government grants. The remaining EUR 70 million will be allocated to the regions of Helsinki, Turku, Tampere and Oulu for transport projects, such as the construction of the Kaukkala bypass in Nurmijärvi and the improvement of the Turku Ring Road (E18) in the Turku region.

Regarding the Trans-European transport network (TEN-T), Finland is participating in 17 projects. Out of the total cost of EUR 670 million, about EUR 300 million has been granted as co-funding. One of the priorities is the implementation of the Rail Baltica project.

The European Investment Bank (EIB) is also a key actor in supporting infrastructure investment in Finland. In 2016 alone, the EIB invested EUR 2.2 billion in Finland, the Bank’s largest ever investment in Finland, with 36% of the funding targeted at infrastructure projects. For instance, the construction of 32 km of the motorway between Hamina and Vaalimaa benefited from a EUR 102 million loan, the building of the Tampere tunnel was granted a EUR 100 million loan and the construction of the wastewater treatment plant in Blominmäki received a EUR 100 million loan. More recently, the EIB provided a EUR 230 million loan for the expansion of Helsinki Airport, which is an important part of the TEN-T.

**TO 2 – Skills**

The level of adult participation in lifelong learning in Finland in 2015 is the third highest in the EU, reaching 25.4%, well above the EU average of 10.7%. The rate of participation of people born outside Finland was higher (28%) than those born in Finland (24.3%). The Vocational Education and Training Act was amended and introduced on 1 August 2015. It is primarily aimed at strengthening the learning-outcome approach of vocational qualification. The new legislation now requires that all vocational qualifications have at least 30, instead of 20, credit of work-based learning opportunities. However, the vocational training budget is planned to be cut by EUR 190 million as of January 2017, reducing the funding available per capita and ultimately the funding available to vocational upper secondary education and training. Apprenticeship training is expected to face the same issue; its budget being cut by EUR 19 million.

Nevertheless, the skill shortage is currently threatening the construction sector, with supply of skilled workers lagging behind the increasing demand (see Skills shortage). To this end, various initiatives to support youth employment in the sector have been introduced at the national level. An instance is The MESTA.net, an online platform where young people can find information on possible careers across a broad number of professions in construction, real estate and design, as well as on all available training courses and training providers in the sector. The website also offers career and training counselling, and was launched by an association of all main construction and real estate stakeholders, including the Confederation of Finnish Construction Industries (RT), the Finnish Construction Managers and Engineers RKL and the Finnish Association of Architects, among others. Ultimately, the goal of The MESTA.net is to improve the attractiveness of the construction sector among young people, motivating them to pursue training and a career in the sector. Similarly, Nuorille töitä (Jobs for Young People) was created with the support of the Confederation of Finnish Industries (Elinkeinoelämän keskusliitto – EK) to bring together young job seekers and employers. Registered enterprises can submit summer jobs, work or apprenticeships opportunities for young people, who can in turn, contact them should a position interest them.
In order to improve the functioning and better control the construction labour market, Finland introduced a Social ID Card scheme in 2006, requiring all workers on shared building sites to wear nametags with photo and employment status (employer, employee, self-employed). Since 2012, the card must also include the worker’s tax code to ensure that workers and their employers comply with the Finnish tax legislation and pay income taxes to the Finnish tax authorities. In 2014, the members of the Confederation of the Finnish Construction Industries (RT) decided on the introduction of another card, the Valtti-älykortti, which allows the storage of additional data, such as qualifications, skills, work permit or license to work with asbestos. Since the introduction of the card, and especially the tax number requirement, tax revenues increased by EUR 500 million, salaries increased by 9% between January 2013-2014 and illegal employment in the construction sector decreased. This contributes to creating a more attractive environment and, in the long run, raising the overall quality of the final construction outputs by attracting more skilled workers.

In order to face the shortage of skills, the Confederation of Finnish Construction Industries (RT) is envisaging the provision of training programmes to turn asylum-seekers into skilled construction workers. The programmes could be organised as part of traditional VET in cooperation with the Training Centre for the Construction Industry (RATEKO). However, this initiative is raising concerns among certain stakeholders, such as the Finnish Construction Trade Union (Rakennusliitto), which believes that more effort should instead be put into giving young people with construction qualifications more employment opportunities.

The Finnish Association of Designers Ornamo further emphasized a shortage of skilled craftsmen in Finland and stressed the fact that asylum seekers represent an untapped pool of skills and offer exciting potential for the future. In this context, the Design Museum, Museum of Finnish Architecture and Ornamo, organised the Crossing borders event on August 22nd aimed at gathering architects, designers and asylum seekers based in Finland in order to provide them with networking activities.

Finally, EU funds also contribute to improving the labour-market prospects of young people and the long-term unemployed, focusing specifically on vocational education training. Thus, under the European Structural and Investment Funds (ESIF), Finland was allocated EUR 347.4 million for the promotion of sustainable and quality employment, and EUR 199 million for educational and vocational training.

**TO 3 - Resource efficiency / Sustainable construction**

In 2014, the Finnish government introduced the third National Energy Efficiency Action Plan (NEEAP-3), as per the requirements of Directive 2012/27/EU on energy efficiency (EED). The NEEAP-3 defines the national cumulative energy savings target for the period 2014-2020 (49 Terawatt/hour - TWh), as well as central government energy savings target (8,225 Megawatt/hour – MWh). The built environment in Finland accounts for about 40% of greenhouse gas emissions and energy consumption, with heating accounting for the vast majority of this. Hence, the reduction of energy use in buildings is a specific priority of the government in tackling climate change. The NEEAP-3 therefore details the measures adopted to address this issue, which are expected to achieve annual energy savings of 16% of the total energy consumption attributable to buildings by 2020. Three measures that should contribute to largest savings in 2020 include the increase use of heat pumps, the building code for new building and the eco-design directive.

In accordance with the EED, Finland introduced the Long-term strategy for mobilising investment in the renovation of buildings, aiming to encourage investments in the deep renovation of the national stock, including residential and commercial buildings, both public and private. The strategy defines cost-effective levels of minimum energy performance requirements for renovations, suitable interventions to be carried out to improve the energy performance of buildings, as well as policies to promote deep renovations. It also highlights the positive impacts of renovations on climate, employment and the general economy.

The Housing Finance and Development Centre of Finland (ARA) also supports renovations of residential buildings by granting housing companies guarantees of up to 70% on their loans, which should be taken out for renovation interventions such as replacement of pipes and improvement of the building envelope.
Voluntary agreements are also a key measure adopted to improve energy efficiency. By entering into such agreements, the central government and the participating sectors aim to meet over half of the binding energy-saving targets set in the EED without introducing new legislation or other coercive measures. Energy efficiency agreements cover all sectors in the economy, namely industry, energy, services, property and building, municipalities, and oil-heated real estates. The most effective agreements for the currently ending period 2008-2016 relevant to the building sector are the Höylä III Programme for energy conservation in oil-heated real estate, and the Energy Efficiency Agreement of the Property and Building Sector 2010-2016, covering rental and commercial properties. The former is expected to achieve energy savings of 2,476 GWh/annum by 2020, whereas the latter up to 430 GWh/annum. Four new energy efficiency agreements for Industries (Industry, Energy sector and Private Service sector), Property Sector, Municipal Sector, and Oil Sector (Distribution of liquid heating fuels) will begin next year for the period 2017-2025. In the property sector, the agreement has been made between the Ministry of Employment and the Economy, the Ministry of the Environment, the Energy Authority and the Finnish Association of Building Owners and Construction Clients (RAKLI).

Finally, the ERA17 Action Plan – For an Energy-Smart Built Environment 2017 aims to reach the efficiency requirements set for 2020 three years early, by 2017, so that by 2050 Finland will boast the world’s smartest and most energy efficient built environment.

The plan places particular attention on land use, construction and renovation, ownership and use of real estate, as well as utilisation of renewable energy.

TO 4 - Single Market
Finland boasts an excellent performance relative to the metrics of the EU Single Market Scoreboard, particularly in terms of Transposition of law, Infringements, Internal Market Information System. Its overall performance in Public Procurement is also well above the EU average, with all indicators reporting a strong score. However, Finland’s performance in terms of the one-bidder indicator (i.e. the proportion of contracts awarded where there was just one bidder) is average.

Finland is performing well in terms of Transposition of law, Infringements, Internal Market Information System. Its overall performance in Public Procurement is also well above the EU average. Contrarily it reports insufficient competition in the service sector, namely retail, transport and construction.

Despite these strengths, Finland reports insufficient competition in the service sector, namely retail, transport and construction. Indeed, planning and zoning procedures are lengthy, highly regulated and restrictive, thus creating problems for obtaining suitable lots for housing and non-residential developments, and hindering investment. Therefore, fostering competition is one of the European Commission’s country-specific recommendations for boosting Finland’s competitiveness and promoting economic growth. Latest updates on the progress of Finland in achieving this country-specific recommendation indicate that some progress have been made in increasing competition in services, as well as in promoting entrepreneurship and investment. Specifically, Finland has taken various measures to open the service sector by reforming key legislation and removing sectoral regulation that prevents competition in transport and retail. With regard to planning and zoning specifically, various amendments to the legislation were implemented. Indeed, in 2015, an amendment to the Land Use and Building Act came into force, including the promotion of the effectiveness of business competition in land use planning provisions. The change aimed to increase the effectiveness of competition through land use policy means, with respect to the construction of wholesale and retail space as well as housing. Moreover, in 2016, another amendment to the Land Use and Building Act came into force, abolishing some burdensome procedures and accelerating regional land use planning. An additional amendment of the Land Use and Building Act is underway and will be ready by the end of 2017. It will improve the streamlining of permits for land use planning and construction.

With regard to the provision of construction services by cross-border service providers, Finland does not have horizontal authorisation schemes in place, which therefore do not constitute a barrier for foreign construction service providers. The country therefore offers a good level of compliance with the Services Directive in this respect. Moreover, Finland allows the
complete handling of building permit applications online, thus minimising the administrative burden linked to the process. However, there are no fixed periods for the authorisation procedure of building permit applications, and the average application processing time is 4 to 12 weeks for a house and 12 to 20 weeks for an office. This lack of nationally defined fixed procedures is considered to be very burdensome and restrictive, and goes against one of the requirements of the Services Directive. Furthermore, energy inspection is considered to be particularly burdensome for cross-border service providers.

Finally, regarding the implementation of Eurocodes, all Parts are published as National Standards. National Annexes are published to all Parts except for EN 1998, and English translations are available for most. Although the use of Eurocodes is voluntary (non-compulsory) in Finland, they are the only means of structural design, and no other national standards are used in parallel. Indeed, National Annexes are used for buildings, roads and bridges. However, there is no particular regulatory framework for the enforcement of Eurocodes in Public Procurement.

TO 5 - International competitiveness

Finland ranks 10th out of 137 economies in the 2017-2018 Global Competitiveness Index. Finland has traditionally been an export-driven economy, and since 2008, a sizeable amount of national policy measures targeted at the growth and support of the internationalisation of SMEs have been put in place. According to the Small Business Act Fact sheet, in 2016, Finland performed below the EU average in terms of internalisation. However, this is mainly due to a change of the indicators used to measure the administrative procedures related to trading with non-EU partners. The proportion of SMEs exporting to non-EU countries has slightly increased since 2015, but the time and cost required to export for documentary compliance have increased above the EU averages. Namely, the cost of exporting was estimated at USD 70 (EUR 59) in 2016, compared to the EU average of USD 16.53 (EUR 14), taking 2 hours against the EU average of 1.39 hour.

The internalisation of construction products and services in the Finnish construction sector has experienced a modest increase since 2010. Indeed, the export values of all construction-related products increased from EUR 1,079 billion in 2010 to EUR 1,097 billion in 2015 (+1.6%), while their share in the total value of production growing from 24.4% to 27.1% in 2010-2015. However, the highest value recorded was in 2012 with 1.21 billion. Over the same period, the value of exports of architectural services experience a more important increase, growing by 21.8%, from EUR 1,043 million to EUR 1,277 million. These trends go in line with the limited export growth in the general economy over the years following the 2008 crisis.

To boosts its exports and maintain its competitive edge, Finland put internationalisation support at the forefront of its policymaking, aiming to get 50% of SMEs to export directly. To this end, several public entities support the growth, innovation and export activities of Finnish enterprises.

The Team Finland network has been particularly active in launching internationalisation initiatives. In particular, Team Finland has launched the reform of Finpro in 2012, in order to better respond to SMEs internationalisation pressing needs. In addition, in 2015-2016, Team Finland introduced its new business model “Team Finland Trade Fair Funding” in cooperation with ELY Centres, Finnvera, Finpro, the Finnish Industry-investment, Tekes and the Ministry of Foreign Affairs. This new model aims at better streamlining the operations of organisations working with Team Finland, providing a centralised contact points for companies and joint service plan prepared by member organisations. Among others, it provides companies with market intelligence, advice and training, networking opportunities as well as information on the available financing instruments for internationalisation.

Finnvera is a government-owned financing company and is the official export credit agency of Finland. It provides financing for start-up, growth and internationalisation, as well as guarantees against political and commercial risks arising from exports. In terms of internationalisation support, it offers internationalisation loans, internationalisation guarantees and export guarantees. The latter in particular can be used for export of services by construction companies and engineering offices.

Similarly, Tekes offers services tailored specifically for SMEs. Instances include the Market Access Programmes, which provide Finnish companies with a tailor-made market entry plan to target markets such as the US, China or Southeast Asia. It also participates in the Vigo programme, together with Finnvera, which is a business accelerator programme for innovative young companies with the potential to grow globally.

Finnish construction companies are also expanding their operations to third countries. For instance, two construction companies, active in construction technologies and concrete products, have recently established their activities in India, which presents many opportunities and less competition. Moreover, another Finnish construction company has recently been granted a contract for the development of residential and commercial properties in Russia.
The Team Finland network is also a pillar of the government’s internationalisation strategy. It brings together all state-funded actors and their services to promote the internationalisation of Finnish companies, attract foreign investments to Finland, and to promote Finland’s country brand. It provides companies with market intelligence, advice and training, networking opportunities as well as information on the available financing instruments for internationalisation.
After a double-dip recession, which struck the Finnish economy first in 2009 and then in 2012, the year 2015 saw the reversal of the negative growth and 2016 confirmed the start of a gradual recovery which, though sluggish, is expected to continue over the next few years. Indeed, GDP is forecasted to increase by 1.3% in 2017, and by 1.7% in 2018 compared to 2016. In line with these projections, the construction industry is predicted to increase to 1.7% in 2017 and 1.4% in 2018 compared to 2016.

In parallel, the number of workers employed in the broad construction sector is projected to increase by 3.5% in 2017, reaching 312,507 people, and by 3.9% in 2018, to 324,718. Similarly, the number of firms operating in the broad construction sector is expected to experience a 10.4% increment in 2017 relative to 2015, and a 15.2% increase in 2018 compared to 2015 levels, reaching 89,470. Positive developments are also expected for the value added of the broad construction sector, which will grow by 14.4% in 2017 compared to 2014, and by 19.2% in 2018 (from 2014 levels), amounting to EUR 20,660. These improvements will be accompanied by a 10.1% increase in turnover in 2017 compared to 2015, and a 14.5% growth in 2018, reaching EUR 55.3 billion.

The residential construction market started to pick up again in 2015, and is predicted to experience a positive trend in terms of housing starts in 2017 and 2018 with blocks of flats being the most produced type of new dwellings far ahead of detached houses and terraced houses. This is particularly true in metropolitan areas, where the demand for dwellings will be boosted by the increasing urbanisation rate, migration, rising consumer demand, as well as the ageing population. Indeed, the latter factor is expected to change the structure of the demand for housing in the future, favouring smaller apartments near city centres over larger houses in the outskirts. Indeed, completions of new single family houses are predicted to fall to about 6,000 per year in 2016-2018, compared to over 15,000 in 2006-2007. Conversely, the number of completed flats will average at about 24,000 per year between 2016 and 2018, the highest since the early 2000s. Nevertheless, the renovation and modernisation (R&M) of residential properties is predicted to grow over the next few years, more so than new construction, with the value of the former predicted to reach a value of over EUR 7.5 billion, compared to over EUR 5.5 billion for new residential construction.

The growth is particularly true in metropolitan areas, where the demand for dwellings will be boosted by the increasing urbanisation rate, migration, rising consumer demand, as well as the ageing population.

The non-residential construction market is particularly affected by the uncertain economic climate, having decreased in 2015. However, construction of commercial and office premises is predicted to pick up in 2016, due to a pipeline of projects especially in the capital region, improving the outlook for the non-residential segment. Indeed, Finland is expected to record a cumulative growth of about 10% in the volume of output from non-residential construction projects in the 2016-2018 period. The total value of the non-residential market is there-
In conclusion, despite the slow signs of recovery, the outlook of the construction sector is still significantly constrained by the generally weak economic context, and especially the decline in exports due to the weak external demand, namely from Russia.

The forecast predicted to reach over EUR 11 billion by 2017, with new non-residential construction accounting for more than EUR 6 billion, and non-residential renovation for about EUR 5 billion.

The outlook for the civil engineering segment is less bright. The pipeline of large infrastructural projects, as well as the government’s financing plan for road and rail projects and for the reduction of the maintenance backlog over the next three years (see TO 1 - Investment conditions and volumes), is expected to temporarily relieve the sector from the previous years’ decline. Nevertheless, the weakened public finances create restrictions for the sector, with new investments from the public sector declining as part of the budgetary constraints. Indeed, the lack of a longer-term investment plan creates further uncertainty, dampening the growth of the sector in the long run.
1. Please note that this 2016 data is a nowcast - please refer to the methodology notes for further details.
2. 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. Please note that this 2016 data is a nowcast - please refer to the methodology notes for further details.
12. Data for real estate activities is incomplete.
13. Please note that this 2016 data is a nowcast - please refer to the methodology notes for further details.
14. The total does not include buying and selling of own real estate, renting and operating of own or leased real estate, and real estate activities on a fee or contract basis, since no data is available for this specific activity within the real estate sub-sector.
15. The gross operating rate is the ratio of Gross Operating Surplus to Turnover, and is an indicator of profitability.
16. Please note that this 2016 data is a nowcast - please refer to the methodology notes for further details.
20. Data for 2013 is incomplete.


Data for real estate activities not available.

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 full-time worker. A full-time person is therefore counted as one FTE, while a part-time worker gets a score in proportion to the hours worked.

Data for 2013 and 2014 unavailable.

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 full-time worker. A full-time person is therefore counted as one FTE, while a part-time worker gets a score in proportion to the hours worked.

Data for 2013 and 2014 unavailable.


Ibidem


Data for real estate activities not available.

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 full-time worker. A full-time person is therefore counted as one FTE, while a part-time worker gets a score in proportion to the hours worked.

Data for 2013 and 2014 unavailable.


European Construction Sector Observatory


75 A housing company, also known as housing cooperative, is a legal entity that owns one or more residential buildings and apartments. When buying an apartment, buyers actually purchase shares of the housing company, proportional to the size of the apartment. The shareholders are thus joint owners of the housing company.


80 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).

81 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.).

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


93 TheMESTA.net, http://themesta.net/


