Chapter 1

ECONOMIC OVERVIEW AND POLICIES

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Economic activity decelerated markedly in the UNECE region in 2019. The slowdown, which was generalized and affected all subregions, occurred against a background of increasing trade tensions, slower global growth and increasing uncertainty. This adverse external context depressed manufacturing and dampened capital spending, particularly affecting those economies most exposed to global trade.

The economic outlook is highly uncertain in light of the COVID-19 pandemic, with no clarity on its duration, the spread of the virus or the need for further restrictive measures. Nevertheless, there has been a bounce in economic activity (from very depressed levels) with the easing of mobility restrictions, supported by significant policy stimulus.

The consumption of industrial roundwood in the UNECE region contracted by 3.5% in 2019, driven by a 3.4% decrease in paper and paperboard consumption. The consumption of sawnwood and wood-based panels also fell in 2019, but by lesser amounts (0.9% and 1.5%, respectively). The biggest declines in consumption were in North America; in contrast, there was a strong increase in the consumption of all forest products in Eastern Europe, Caucasus and Central Asia (EECCA).

Housing markets continued to grow in 2019. The housing sector recorded a fifth consecutive year of growth in Europe but remained below its 2015 peak in EECCA.

In the Russian Federation, the number of applications for the construction of wooden houses increased by 30% in March 2020 compared with the same period in 2019 (possibly linked to a desire among city dwellers to avoid COVID-19 exposure by relocating to rural homes). There are indications that the construction of these houses could grow in the next six months by 15-20% above historical averages.

Housing prices have generally performed better than economies in most countries in the UNECE region. The Bank of International Settlements reported that residential housing prices increased by 0.9% globally in 2019 and by 3.0% in the euro area, 2.0% in the US and 3.0% in the Russian Federation.

The area of certified forests worldwide was 434.5 million hectares (ha) in mid-2019, up by 1.4% compared with mid-2018 and slightly below the record achieved in mid-2017. The area of double-certified forests increased by 8% in 2019, to 93 million ha. Initial data indicate that the area of certified forests may have reached a new record high in mid-2020, but this can only be confirmed when information on double-certified forest area becomes available.

The forest-sector policy focus in 2019 was on climate change and a circular economy in Europe; the increased use of wood for construction in EECCA; and the trade of forest products in North America.

A sense of urgency about the need to address climate change is still evident in many national policies and private-sector commitments. As of April 2020, 45 national jurisdictions worldwide had implemented carbon-pricing initiatives through either taxes on fossil fuels or cap-and-trade programmes. As of June 2020, 237 companies across 44 countries representing more than $3.6 trillion in market capitalization had committed to ambitious emissions reduction targets.
The 2020 edition of the UNECE/FAO Forest Products Annual Market Review provides a statistical review of market developments in the UNECE region in 2019 and the first half of 2020 and the policies driving those developments. This year, the Review also includes forecasts for 2020 and 2021. The UNECE region has three subregions: Europe; ECECA; and North America. It encompasses about 1.7 billion ha of forest, which is more than 40% of the world’s total forest area. This chapter acts as an executive summary and provides a policy and economic background for the subsequent product-oriented chapters. The subchapters on economic developments, and construction and housing, which follow this section, describe the broad macro-economic situation affecting demand in the UNECE region. Subchapters on the bark-beetle outbreak in Europe, policy and regulatory developments and forest certification address other factors affecting forests and forest product markets in the region in 2019 and beyond.

The Review presents the best available annual statistics for 2019-2020 collected by the Joint UNECE/FAO Forestry and Timber Section from official national statistical correspondents and expert estimates.

The trends discussed in this publication comprise a mix of data from the UNECE/FAO timber database (presented for the UNECE region as a whole and for each of the three subregions) and information from other cited sources. The publication also includes information on other markets where these influence the UNECE region.

References to “Europe,” “EECCA” and “North America” in this publication always pertain to the standard subregions (see the map, “Countries in the UNECE region, and its subregions,” in the annex of this publication). Electronic annexes provide additional statistical information, and the full UNECE/FAO database is available on the web.

**Economic developments in the UNECE region**

Economic activity decelerated markedly in the UNECE region in 2019. The slowdown, which was generalized and affected all subregions, occurred against a background of increasing trade tensions, slower global growth and increased uncertainty. This adverse external context depressed manufacturing and dampened capital spending, particularly affecting those economies most exposed to global trade. In the euro area, the contribution of external demand to growth continued to decline. In the US, the deceleration was due to weaker domestic demand. In ECECA, external factors played a determining role in the slowdown. In early 2020, the COVID-19 pandemic and the confinement measures imposed to arrest its spread dealt a devastating economic blow across the UNECE region and beyond. Countries with sizeable service sectors were hit particularly hard. In ECECA, depressed commodity prices added to the contractionary forces, despite some recovery from previous lows. Efforts to contain the pandemic have had varying levels of success in the region, but the economic outlook remains uncertain.

There were positive developments in the labour market in 2019. The unemployment rate in the euro area attained lows last seen before the global financial crisis, and differences narrowed among countries in the monetary union. After years of tightening labour markets, the recourse to temporary work declined. Nevertheless, a loss of momentum was already evident in late 2019, in line with an economic weakening. In ECECA, unemployment also reached new lows in 2019.

The good employment news ended abruptly with the COVID-19 pandemic. Affected service sectors are particularly employment-intensive. In the EU, the increase in unemployment in early 2020 was limited by government-funded job-retention schemes, in sharp contrast to the US, where the unemployment rate reached 14.7% in April of 2020 (up from 3.5% just two months earlier), putting an end to a decade of employment creation. Although it is still difficult to predict the permanent effects of the pandemic on employment, a wider spread of unemployment rates across the EU seems likely, reflecting the differentiated impacts of the crisis.

The effect of rising wages on inflation was muted in 2019, which helped increase the purchasing power of households. In the EU, the pace of household real income growth accelerated, but this was driven to a larger extent than in the past by increases in wages rather than by employment, thus having a lower impact on consumption. In the euro area, the household savings rate rose steadily in 2019 and soared in early 2020 as countries introduced COVID-19 containment measures. The savings rate was flat in the US in 2019 but skyrocketed in early 2020. Fiscal measures introduced in 2019 raised household income growth in some countries, including a number of economies in central Europe. Overall, the improvement in the labour market in 2019 continued to boost consumption in the EU. In the US, in contrast, the deceleration of consumption explained half the slowdown in output growth in 2019.

In the absence of inflationary pressures and faced with softening economic activity, monetary authorities loosened monetary policy further. In the second half of 2019, the US Federal Reserve lowered the target range for the federal funds rate by 75 basis points and slashed it by 150 basis points in the first months of 2020. In the euro area, interest rates were pushed further into negative territory, and the European Central Bank restarted net asset purchases in November 2019, to be maintained for as long as necessary. Interest rates in the Russian Federation have gradually but steadily been cut since mid-2019. The euro’s slide against the dollar, which started in 2018 in a context of growing political risks, trade tensions and
unfavourable interest-rate differentials, continued in 2019. It reversed in 2020, however, as relative economic prospects were reassessed. Lower commodity prices have translated into exchange rate pressures in several EECCA economies in 2020 (graph 1.1).

The economic outlook is highly uncertain given a lack of clarity on the duration of the pandemic, the spread of the virus and the need for further restrictive measures. There has been a bounce in economic activity (from very depressed levels) with the easing of mobility restrictions, supported by significant policy stimuli. Nevertheless, the recovery from this low point is projected to be insufficient to prevent a deep output contraction in the UNECE region in 2020, even if a new wave of infections in the second half of the year is avoided. The COVID-19 pandemic threatens to leave a long-lasting legacy that could include businesses closing and persistently high unemployment.

Construction in the UNECE region, with a focus on housing

Housing prices in 2019, on a percentage basis, have risen more than GDP growth in most UNECE region countries. The Bank of International Settlements (BIS) reported that residential housing prices increased by 0.9% globally in 2019 and by 3.0% in the euro area, 2.0% in the US and 3.0% in the Russian Federation. Canadian house prices increased by 0.3% in the last quarter of 2019. Real residential prices (adjusted for inflation) “have reached historically high levels since the aftermath of the 2007-09 Great Financial Crisis” (BIS, 2020).

Housing markets recorded a fifth consecutive year of growth in 2019. New residential building remains a value driver in the Euroconstruct region; accounting for nearly 21% (€305 billion) of the construction market value in 2019; residential remodelling comprised 26% (€398 billion). New residential spending increased by 26% (€57.7 billion) in the Euroconstruct region between 2016 and 2019.

The total value of all construction in the Euroconstruct region (residential, non-residential and civil engineering) is projected to decrease by 11.5% in 2020, to €1.50 trillion (table 1.1).

An estimated 1.7 million new-housing permits were issued in the Euroconstruct region in 2019. Graph 1.2 shows total permits, starts and completions in the Euroconstruct region from 2002 to 2019 (and forecasts to 2022).

The construction of new housing in the Russian Federation grew to 80.3 million m² in 2019 (up by 6.1%, year-on-year), still below the peak of 85.3 million m² in 2015 (Federal State Statistics Service, 2020). In anticipation of government reforms to real estate finance via mandated escrow accounts, developers have accelerated the pace of construction, so they do not have to transfer ongoing projects to the new financing system (The Federal law, 2018).

On 24 April 2020, the Bank of Russia lowered its key interest rate to 5.5% per annum (Central Bank, 2020), which should stimulate home sales. The Russian Government is now (as of 9 April 2020) subsidizing down-payments (up to 350,000 roubles) for the purchase of wooden houses (Government of the Russian Federation, 2020a). The number of applications for the construction of wooden houses was up by 30% in March, year-on-year (possibly linked to the desire of city dwellers to avoid COVID-19 exposure). The total production, construction and sales of these wooden houses could grow by 15-20% within six months (Wood Housing Association, 2020).
The US housing construction market grew moderately in 2019, but total new housing starts remained below the 1959-to-2007 average of 1.547 million total units and 1.102 million single-family units. Housing starts were estimated at 1.250 million in 2019, a 3.9% increase from 2018 (graph 1.3). The Mortgage Bankers Association has projected US housing starts at 1.18 million units in 2020, 1.28 million units in 2021 and 1.39 million units in 2022 (MBA, 2020).

Initially, new Canadian housing starts were projected at 204,300 units in 2020 and 206,300 units in 2021 (CHMC, 2020a). Due to COVID-19, however, this was amended to 192,671 starts in 2020 (CHMC, 2020b), a decrease of 6.7%. The abrupt decrease in immigration due to the pandemic is projected to have long-term implications for the housing market.

Housing affordability and availability are problems in all three UNECE subregions, with insufficient new buildings to meet population growth. Many observers consider that off-site manufacture could enable the building and sale of less-expensive housing units. Conceptually, modular houses can be built in shorter timeframes, and more houses could potentially be delivered to buyers. Thus, modular construction could reduce project completion times and material costs, provide greater quality control, mitigate labour shortages, improve safety and offer year-round manufacturing.

### TABLE 1.1

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<td></td>
<td>BILLION (€)</td>
<td>CHANGE (%)</td>
<td></td>
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<tr>
<td>New residential</td>
<td>356.3</td>
<td>305.5</td>
<td>322.7</td>
<td>-14.3</td>
<td>5.6</td>
</tr>
<tr>
<td>construction</td>
<td></td>
<td></td>
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<tr>
<td>Residential remodelling</td>
<td>445.2</td>
<td>397.9</td>
<td>425.1</td>
<td>-10.6</td>
<td>6.8</td>
</tr>
<tr>
<td>Non-residential – new</td>
<td>287.5</td>
<td>244.4</td>
<td>250.8</td>
<td>-15.1</td>
<td>2.6</td>
</tr>
<tr>
<td>Non-residential – remodelling</td>
<td>249.9</td>
<td>221.8</td>
<td>236.0</td>
<td>-11.2</td>
<td>6.4</td>
</tr>
<tr>
<td>Civil engineering – new</td>
<td>201.4</td>
<td>186.3</td>
<td>201.5</td>
<td>-7.5</td>
<td>8.2</td>
</tr>
<tr>
<td>Civil engineering – remodelling</td>
<td>156.3</td>
<td>145.6</td>
<td>154.9</td>
<td>-6.8</td>
<td>6.4</td>
</tr>
<tr>
<td>Total</td>
<td>1,697</td>
<td>1,501</td>
<td>1,591</td>
<td>-11.5</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Note: in 2018 prices; e = estimate; f = forecast.


### GRAPH 1.2

Building permits, starts and completions, Euroconstruct region, 2002-2022

Note: e = estimate; f = forecast.


### GRAPH 1.3

US housing permits, starts and completions, 2011-2020

Note: f = forecast; January-June 2020 data; seasonally annualized adjusted rate.

**Bark-beetle outbreak in Europe**

The availability of logs is a core factor for forest product markets. Normally, trees are a commodity with a certain level of resilience in the face of market swings because standing forests require little in the way of tending and related costs; strong swings can often be mitigated or taken advantage of by postponing or hastening harvests. This stabilizing mechanism goes awry, however, when major forest disturbances occur, with potentially catastrophic short- and longer-term consequences.

Coniferous roundwood markets in the UNECE region have been significantly affected by an increase in salvage operations in recent years. Although markets may be oversupplied with wood in the direct aftermath of a major forest disturbance, long-term planned wood supply may be disrupted for decades. Moreover, in the increasingly globalized trade of raw materials, markets and forests far from such a disturbance may be perturbed as a result of spillover effects.

Forest product markets are frequently affected by disturbances, but some years stand out. Here, we focus on the ongoing bark-beetle infestation in central European forests, which is affecting Norway spruce (*Picea abies*), a staple source of industrial roundwood in Europe. Two bark-beetle species are causing significant damage: *Ips typographus* and *Pityogenes chalcographus*.

There have been several mass outbreaks of *Ips typographus* infestations in the European subregion since 1970, affecting as little as about 2 million m³ in 1971-1980 (Grégoire and Evans, 2004) and as much as 14.5 million m³ in 2002-2010 (Seidl et al., 2014). Both those infestations are dwarfed by the current outbreak, however, which has affected more than 200 million m³ of standing timber and appears to be continuing in 2020 (table 1.2).

Much of Europe experienced a record dry and warm summer in 2018. Trees weakened by water and temperature stress were easy targets for the beetles, and beetle populations grew exponentially. Although warmer and drier weather was a contributing factor, high winds also played a role, with windthrown trees acting as a catalyst for the beetle population to increase exponentially (such trees are food sources with no resistance to the beetle). Many of the affected forests are in areas where spruce was planted outside its historical natural range (Jansen et al., 2017). Moreover, the vulnerability of much of the planted spruce forest in central Europe was recognized decades ago (Klimo et al., 2000).

Salvage volume due to the beetle infestation exceeded 30 million m³ in 2018. The epidemic worsened in 2019, with salvage volume almost double that in 2018. Preliminary estimates for 2020 indicate that beetle salvage volumes will be at similar levels to 2019.

Coniferous industrial roundwood prices in the European subregion dropped as a result, particularly in central Europe (WRI, 2020). Initially this occurred only in beetle-affected areas, but eventually it spilled over into unaffected areas, with many of the countries suffering bark-beetle outbreaks becoming net exporters of roundwood (in some cases reversing traditional trade flows of coniferous industrial roundwood). Germany, for example, became a net exporter of coniferous roundwood after being a significant net importer for many years.

The global trade of softwood logs amounted to about 93 million m³ in 2019, with just under half destined for China. A significant component of the logs exported to China was salvaged spruce, generally shipped in containers returning to China. China imported 9% more softwood logs in 2019 than in 2018 but paid 2% less (in US dollar terms). Imports of softwood logs to China in 2019 increased 18-fold from Germany (to 3.8 million m³) and 12-fold from Czechia (to 2.3 million m³) (ITTO, 2020a).

COVID-19 has affected the industrial production and international trade of many products and therefore the shipping of standard containers. With fewer containers coming from Asia to the UNECE region, fewer empty containers need to be shipped back to Asia. Consequently, freight rates have increased dramatically in 2020 for shipping from Europe to China (as of April 2020) (Freightos, 2020). Higher freight rates will have a detrimental effect on export opportunities.

Most salvage wood (e.g. from trees killed by insects, fire or windthrow) retains its full potential value if harvested immediately. Time lags between tree mortality and end use, however, increase the potential for degrade, starting with stains and shrinkage cracks (affecting appearance but not strength), followed eventually by decay. There is concern that beetle-hit trees could go to waste. Some countries have taken measures to support forest owners in salvaging affected stands (to limit the further spread of the bark-beetle outbreak) and storing harvested logs in a supersaturated state (which significantly slows degrade and decay).

The COVID-19 pandemic has happened at a particularly bad time for the bark-beetle salvage, depressing demand when salvage logs must be used quickly to avoid degradation and decay. It is hoped that the Market Discussion to be held at the 2020 session of the Committee on Forests and Forest Industry will provide more clarity on the effects of the bark-beetle outbreak and COVID-19 on forests and forest-based industries.
### TABLE 1.2
Central European bark-beetle infestation: summary by country, and annual removals

<table>
<thead>
<tr>
<th>Country and summary of infestation situation</th>
<th>Annual removals of coniferous industrial roundwood due to bark-beetle infestation (1,000 m³)</th>
<th>Total annual removals of coniferous industrial roundwood (1,000 m³)</th>
<th>Average 2005-2015</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria: Windthrows in late 2019 and early 2020 have further fuelled the beetle epidemic, which is expected to continue in 2020.</td>
<td>2,263&lt;sup&gt;a&lt;/sup&gt; 2,940&lt;sup&gt;a&lt;/sup&gt; 3,271&lt;sup&gt;a&lt;/sup&gt; 4,292&lt;sup&gt;a&lt;/sup&gt; 4,213&lt;sup&gt;a&lt;/sup&gt;</td>
<td>12,678 12,821 12,343</td>
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<tr>
<td>Czechia: The quantity of harvested wood now exceeds domestic demand, leading to record exports of coniferous roundwood and sawnwood.</td>
<td>2,309 4,420 5,852 13,059 22,779</td>
<td>13,343 20,613 25,363</td>
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</tr>
<tr>
<td>Germany: The Federal Ministry of Food and Agriculture estimates that 160 million m³ of wood has been damaged in 2018-2020, of which 95% is coniferous.</td>
<td>3,348 4,667 6,003 32,617&lt;sup&gt;b&lt;/sup&gt; 63,729&lt;sup&gt;b&lt;/sup&gt;</td>
<td>44,317 46,125 46,835</td>
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<tr>
<td>Poland: The 2019 salvage volume of coniferous logs was 6.52 million m³, with windthrow comprising more than one-third of this. Spruce accounted for 2.7 million m³ of salvage logs harvested in 2019 (primarily infested by <em>Ips typographus</em>). Salvaged pine volume was 3.5 million m³ (primarily <em>Ips acuminatus</em>). This trend appears to be continuing in 2020.</td>
<td>1,793&lt;sup&gt;c&lt;/sup&gt; 3,298&lt;sup&gt;c&lt;/sup&gt; 2,698&lt;sup&gt;c&lt;/sup&gt; 2,797&lt;sup&gt;c&lt;/sup&gt; 4,016&lt;sup&gt;c&lt;/sup&gt;</td>
<td>24,619 33,206 31,093</td>
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<tr>
<td>Slovakia: Salvage fellings were about 5.1 million m³ in 2019, of which about 3.7 million m³ was the result of the beetle. The quantity of harvested wood now exceeds domestic demand and log storage capacity.</td>
<td>1,500&lt;sup&gt;d&lt;/sup&gt; 3,400&lt;sup&gt;d&lt;/sup&gt; 3,800&lt;sup&gt;d&lt;/sup&gt; 3,400&lt;sup&gt;d&lt;/sup&gt; 3,700&lt;sup&gt;d&lt;/sup&gt;</td>
<td>5,058 5,527 5,028</td>
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<tr>
<td>Slovenia: The Slovenian forest service reported that 1.34 million m³, mostly spruce, was harvested in 2019 due to the bark-beetle infestation (47% of all salvage harvest). The infestation is expected to continue into 2020.</td>
<td>1,820 2,320 1,840 740 1,340</td>
<td>1,807 3,921 3,413</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Switzerland: 2 million m³ of wood was reportedly damaged by bark beetles in 2019: 1.4 million m³ of spruce was affected by <em>Ips typographus</em>, and the fir engraver beetle (<em>Pityokteines curvidens</em>) damaged about 0.6 million m³ of silver fir. The insect outbreaks will likely continue in 2020, especially in the lowlands of the northern plateau. Windthrow events in early 2020 will help fuel this.</td>
<td>208 180 270 650 1,134</td>
<td>2,998 3,239 2,670</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>TOTAL</td>
<td>9,893 16,558 17,731 57,555 100,911</td>
<td>104,820 125,452 126,746</td>
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</tbody>
</table>

**Note:** The data presented in this table are based on narratives submitted by country correspondents of the UNECE member States listed in this table and the sources given below. The figures vary in their definition, coverage and scope. Where not stated otherwise, volumes are reported in 1,000 m³ under bark. The following exceptions apply to the reported figures: a total by bark-beetle-damaged wood over bark (not only the removed timber), b abiotic and biotic disturbances over bark (not only the removed timber), c salvage logging, and d biotic disturbances.

**Sources:** Austria: Steyerer et al. (2020), Czechia: Statistical Office of Czechia, personal communication, 2020, Germany: DeStatis (2020) and Federal Ministry of Food and Agriculture (2020), Poland: Jabłoński et al. (2020); Slovakia: Kunka et al. (2019); Slovenia: Slovenian Environmental Agency (2020); Switzerland: Queloz et al. (2020).
Chapter 1 Economic overview and policies

Policy and regulatory developments

This section looks at recent developments in policies that directly or indirectly affect forests and forest product markets. The policy focus in 2019 was on climate change and a circular economy in Europe; the legal and sustainable harvesting of forests and the increased use of wood for construction in EECCA; and the trade of forest products in North America.

A sense of urgency on the need to address climate change is still evident in policies and private-sector commitments. As of April 2020, 45 national jurisdictions worldwide had implemented carbon-pricing initiatives through either taxes on fossil fuels or cap-and-trade programmes. As of June 2020, 237 companies across 44 countries representing over $3.6 trillion in market capitalization had committed to ambitious emissions reduction targets.

**EUROPE**

In December 2019, the European Commission presented the “Green Deal” as an integral part of the its strategy to address climate change by de-carbonizing the EU economy and thus also implementing the 2030 Agenda for Sustainable Development and the Sustainable Development Goals.

As part of the Green Deal, the Commission will refocus the European semester process of macro-economic coordination to put sustainability and the well-being of citizens at the centre of economic policy and the SDGs at the heart of EU policy-making and action.

A road map outlines the actions, key policies and measures needed to achieve the European Green Deal, many of them with potential to significantly involve forests, forest products and the ecosystem services provided by forests.

Climate action is one of the main drivers of the European Green Deal, with 25% of the EU budget dedicated to climate action (EU, 2020a). Some of the following elements of such climate action may be particularly relevant to forests and forest products:

- revision and expansion of the EU emissions trading system, which includes reducing greenhouse-gas emissions from the power sector, industry, and flights within the EU;
- national targets for sectors previously outside of emissions trading, such as transport, buildings and some subsectors of agriculture;
- ensuring that EU forests and lands contribute to the fight against climate change; and
- boosting energy efficiency, renewable energy and the governance of EU countries’ energy and climate policies.

A significant proportion of the budget dedicated to climate action will be invested in biodiversity and nature-based solutions. The EU biodiversity strategy (EU, 2020b) highlights the following key commitments on nature protection to be achieved by 2030:

- protect a minimum of 30% of the EU’s land area and 30% of the EU’s sea area;
- strictly protect at least one-third of the EU’s protected areas, including all remaining EU primary and old-growth forests, having defined, mapped and monitored them;
- effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately;
- set nature-restoration targets, as well as actions such as integrated ecological corridors, as part of a true Trans-European Nature Network;
- plant at least 3 billion new trees by 2030, many in (peri-) urban areas.

The European Council has called for a new EU forest strategy to further strengthen the consistency and coherence of EU forest-related policies beyond 2020 (EU, 2019). This is now foreseen for early 2021. Key elements of the new strategy will likely be effective afforestation, forest conservation and restoration in the EU to increase the potential of forests to absorb and store carbon, promote the bio-economy and reduce the impact and extent of fires while protecting biodiversity. The strategy will likely cover the entire forest cycle and promote the numerous ecological and socio-economic services provided by forests, including peri-urban trees (European Parliament, 2020). Partly in anticipation of the strategy but also other policy developments, the Forest-based Sector Technology Platform has adopted its “Strategic Research & Innovation Agenda 2030” (Forest-based Sector Technology Platform, 2020a), close on the heels of its “Vision 2040” (Forest-based Sector Technology Platform, 2020b), while an ad hoc grouping of the EU Expert Group on Forest-based Industries and Sectorally Related Issues produced
its forward-looking “Vision 2050” (European Forest-Based Industries, 2019).

On 17 October 2019, the UK and the EU reached an agreement on the conditions for the UK’s departure from the EU (known as Brexit) and on a transition period to 31 December 2020. The UK left the EU on 31 January 2020 and the transition period will not be extended. All EU rules and laws will continue to apply to the UK during the transition period. Accordingly, little or nothing has yet changed legally for businesses or the public. However, Brexit stocks built up in 2019 in anticipation of slower customs clearance have been used up during the COVID-19 pandemic and it remains to be seen what will happen in 2021.

**EECCA**

In 2019, the Russian Federation's Federal Forestry Agency audited lease agreements allocated to businesses in 64 regions that made qualifying investments in forest-sector businesses (harvest allocations without auction and a 50% discount on payments for the use of forests). There were 4,588 of these lease agreements involving 2,650 leaseholders and a harvest of 190 million m³. The audit found more than 2,000 violations and, as a result, 32 contracts for a total of 2 million m³ were terminated (Ministry of Natural Resources and Environment of the Russian Federation, 2020). Subsequently, the Russian Government increased the minimum investment from 500 million roubles ($7.98 million) to 2 billion roubles ($31.9 million) for modernization projects and from 750 million roubles ($12.0 million) to 3 billion roubles ($47.9 million) for greenfield projects (Government of the Russian Federation, 2019a).

The Russian Export Center and the Ministry of Industry and Trade have modified the subsidies available for forest industry companies. Manufacturers with long-term commitments to increase exports and implement corporate competitiveness improvement programmes can now qualify (Ministry of Industry and Trade, 2019).

As of April 2020, the Russian Government is restricting the importation of furniture for municipal and public procurement (Government of the Russian Federation, 2020b) with the aim of supporting Russian furniture manufacturers (Association of Furniture and Woodworking Enterprises of Russia, 2020a).

In September 2019, the Russian Government increased log export duties from 6.5% to 13% for species from the Russian Far East (Government of the Russian Federation, 2019b). As of August 2020, exporters applying for tariff quotas to export unprocessed softwood will have to indicate transactions in an automated system. These data will enable the tracking of wood supply chains from harvesting sites to buyers (Government of the Russian Federation, 2019c).

The Russian forest industry was not put on the list of sectors most affected by the spread of COVID-19 (the furniture industry has been partially included) (Government of the Russian Federation, 2020c). However, 35 wood enterprises and 18 furniture companies have been listed for possible State aid, including tax and insurance contribution deferrals, State guarantees for loans, and subsidies (Government of the Russian Federation, 2020d). Companies applying for the aid will have to undergo a stress test, with results to be reviewed and acted on by the interdepartmental and government commissions for economic development and sustainability enhancement.

In mid-May 2020, WhatWood surveyed large timber industry companies in the Russian Federation about the effects of the COVID-19 pandemic on production and sales, with the domestic market falling off by roughly 50%. Furniture factories and enterprises are closed, as are retail outlets. The situation is clearly affecting demand in several key markets, but there are no plans for significant production curtailments. Most Russian companies have been able to maintain production and sales (WhatWood, 2020a).

Of the Russian Federation’s forest product sectors, furniture and wood-based panels have been most affected by COVID-19. About 70% of Russian furniture enterprises may go bankrupt due to forced production downtime, coupled with a lack of State support. Just over two-thirds of surveyed companies reported a financial “cushion” of no more than about 1.5 months. Only one-quarter was sure they would survive the crisis, and 3% of plants have already closed (Association of Furniture and Woodworking Enterprises of Russia, 2020b).

**NORTH AMERICA**

The Softwood Lumber Agreement between Canada and the US expired on 12 October 2015. In place since 2006, this agreement addressed tariffs on lumber traded between the two countries as part of a decades-long trade dispute covered
in earlier editions of the Review. In April 2018, at the request of Canada, the World Trade Organization (WTO) established a panel to examine Canada’s complaints regarding antidumping and countervailing duties imposed by the US on imports of Canadian softwood lumber (WTO, 2018). On 9 April 2019, the WTO issued the panel report; it agreed with the US Department of Commerce’s methodology using zeroing and rejected Canada’s claims (WTO, 2019a). Canada announced its intention to appeal the panel decision (Global Affairs Canada, 2019). On 15 November 2019, the panel chair indicated that the panel was expected to issue its final report in 2020 (WTO, 2019b).

The US–Canada softwood trade disputes have also been the subject of a panel under the North American Free Trade Agreement (NAFTA). On 22 May 2020, the binational panel issued its final decision on the matter of “Softwood Lumber Injury from Canada” (US Federal Register, 2020a). The NAFTA panel affirmed the decision by the US International Trade Commission (USITC) that softwood lumber imports from Canada have “materially injured” US producers and workers (The Canadian Press, 2020).

The United States–Mexico–Canada Agreement (USMCA) came into effect on 1 July 2020, replacing NAFTA, which expired on 30 June 2020. An analysis prepared by the USITC estimates that the USMCA would raise US real GDP by $68.2 billion (0.35 percent) and US employment by 176,000 jobs (0.12 percent). The analysis also found that the environment chapter of the agreement references clean technologies as a means for improving environmental and economic performance and the role that forests play in carbon storage but is otherwise minimalistic on greenhouse-gas emissions and climate-change mitigation (USITC, 2019).

The US Department of Agriculture (USDA)’s Animal and Plant Health Inspection Service (APHIS) announced the implementation of phase 6 of the Lacey Act enforcement schedule, which will go into effect on 1 October 2020. First enacted in 1900, the Lacey Act combats trafficking in illegal wildlife, fish and plants. The Food, Conservation, and Energy Act of 2008 amended the Lacey Act to require importers to submit declarations at the time of importation for certain products. APHIS ensures compliance with the declaration requirement, and products needing declarations have been phased in since enforcement began in 2009. The additional products covered by the phase-6 enforcement schedule include certain essential oils (e.g. cedarwood and sandalwood), wood cases and trunks, oriented strandboard (OSB), boxes, crates, pallets and musical instruments (e.g. clarinets and drums) (US Federal Register, 2020b).
The US Forest Service is revising the regulations of the National Environmental Policy Act (NEPA) governing environmental analysis and decision-making in the agency, including on forest management and harvesting activities. The US Forest Service last updated its NEPA regulations in 2008, and the proposed rule is intended to enable timelier decisions based on high-quality, science-based analyses and to improve project implementation while meeting environmental responsibilities (USFS, 2020).

Certified forests and products

The area of certified forests worldwide increased by 1.4% (6 million ha) between mid-2018 and mid-2019, to 434.5 million ha, which was slightly below the all-time high achieved in mid-2017 (graph 1.4). The two major schemes, the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC), reported a combined total of 525 million ha of certified forest, as of mid-2019. After accounting for double-certification (i.e. forest areas certified by both certification bodies), however, this dropped to 434.5 million ha (PEFC, 2020a).

The PEFC’s revised Sustainable Forest Management and Group Certification benchmark standard published in November 2018 extended PEFC certification to encompass trees outside forests. The PEFC benchmark can now be applied to agroforestry and urban forestry (PEFC, 2018). The Sustainable Forestry Initiative (SFI), a PEFC-endorsed programme operating in Canada and the US, has included consideration of the development of an urban-forest certification standard in its standards revision process (SFI, 2020).

The latest data on urban forests in the US were used in research to estimate the potential annual value that could be derived from urban tree waste (Nowak, 2019). Assuming a mortality rate of 2%, annual urban woody biomass loss in the US is estimated at about 46 million tonnes of fresh-weight merchantable wood, equivalent to 7.2 billion board feet of lumber or 16 million cords of firewood. Urban-tree wood waste in the US could produce substantial annual revenue if utilized (Nowak, 2019), with the value varying by location and the product produced (e.g. sawlogs versus wood chips). Although some cities already make use of urban waste wood, the potential is largely undeveloped. There are various reasons why revenue potential is limited, but improving markets and systems for the use of these materials could enhance urban-forest economics and provide social and environmental goods and services (Nowak, 2019).

Recent research in Germany examined the suitability of urban wood for the manufacture of solid wood products and concluded that there is potential to manufacture municipal tree residues into high-value products, thereby boosting local economies and creating income for urban-forest management. Constraints on realizing this potential include susceptibility to embedded foreign objects and inconsistent wood supply (Rokita, 2020). The research also examined urban-forest management history in the US and Europe. US research is strongly dominant in the field of urban forestry, but Europe has a much longer history of greenspace planning and management. Urban forestry developed significantly in the US in the 1970s, with interest in more comprehensive tree care and in response to the increasing threat posed by pests and diseases. Inspired by visits to North America and by international conferences, British, Irish and Dutch experts introduced the urban-forestry concept to Europe in the early 1980s, with projects based on US examples implemented in London, Belfast and elsewhere (Rokita, 2020).

Summary of regional and subregional markets

The overall consumption of primary forest products declined modestly in the UNECE region in all general categories in 2019: by 3.4% for industrial roundwood; by 0.9% for sawnwood; by 1.5% for wood-based panels; and by 3.5% for paper and paperboard (table 1.3). Of the three subregions, only EECCA showed positive growth in consumption, although industrial roundwood consumption declined in that subregion (due to fewer exports).
### TABLE 1.3
Apparent consumption of industrial roundwood, sawnwood, wood-based panels and paper and paperboard, UNECE region, 2015-2019

<table>
<thead>
<tr>
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<tbody>
<tr>
<td><strong>Industrial roundwood</strong></td>
<td></td>
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</tr>
<tr>
<td>Europe</td>
<td>m³</td>
<td>401,548</td>
<td>410,042</td>
<td>409,358</td>
<td>441,652</td>
<td>424,913</td>
<td>-16,740</td>
<td>-3.8</td>
<td>5.8</td>
</tr>
<tr>
<td>EECCA</td>
<td>m³</td>
<td>185,471</td>
<td>194,721</td>
<td>198,419</td>
<td>226,348</td>
<td>213,170</td>
<td>-13,178</td>
<td>-5.8</td>
<td>14.9</td>
</tr>
<tr>
<td>North America</td>
<td>m³</td>
<td>494,222</td>
<td>516,384</td>
<td>513,350</td>
<td>534,285</td>
<td>522,862</td>
<td>-11,424</td>
<td>-2.1</td>
<td>5.8</td>
</tr>
<tr>
<td>Total, UNECE region</td>
<td>m³</td>
<td>1,081,241</td>
<td>1,121,148</td>
<td>1,121,127</td>
<td>1,202,286</td>
<td>1,160,944</td>
<td>-41,341</td>
<td>-3.4</td>
<td>7.4</td>
</tr>
<tr>
<td><strong>Sawnwood</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Europe</td>
<td>m³</td>
<td>103,760</td>
<td>107,552</td>
<td>110,809</td>
<td>112,780</td>
<td>112,393</td>
<td>-387</td>
<td>-0.3</td>
<td>8.3</td>
</tr>
<tr>
<td>EECCA</td>
<td>m³</td>
<td>17,219</td>
<td>16,689</td>
<td>17,792</td>
<td>17,039</td>
<td>17,890</td>
<td>850</td>
<td>5.0</td>
<td>3.9</td>
</tr>
<tr>
<td>North America</td>
<td>m³</td>
<td>112,603</td>
<td>117,570</td>
<td>118,392</td>
<td>120,097</td>
<td>117,491</td>
<td>-2,605</td>
<td>-2.2</td>
<td>4.3</td>
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<tr>
<td>Total, UNECE region</td>
<td>m³</td>
<td>233,582</td>
<td>241,811</td>
<td>246,992</td>
<td>249,916</td>
<td>247,774</td>
<td>-2,142</td>
<td>-0.9</td>
<td>6.1</td>
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<tr>
<td><strong>Wood-based panels</strong></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Europe</td>
<td>m³</td>
<td>68,738</td>
<td>72,065</td>
<td>74,556</td>
<td>77,019</td>
<td>76,378</td>
<td>-641</td>
<td>-0.8</td>
<td>11.1</td>
</tr>
<tr>
<td>EECCA</td>
<td>m³</td>
<td>17,131</td>
<td>16,687</td>
<td>18,351</td>
<td>21,198</td>
<td>21,326</td>
<td>128</td>
<td>0.6</td>
<td>24.5</td>
</tr>
<tr>
<td>North America</td>
<td>m³</td>
<td>53,073</td>
<td>54,270</td>
<td>56,603</td>
<td>54,771</td>
<td>53,060</td>
<td>-1,711</td>
<td>-3.1</td>
<td>0.0</td>
</tr>
<tr>
<td>Total, UNECE region</td>
<td>m³</td>
<td>138,943</td>
<td>143,023</td>
<td>149,511</td>
<td>152,988</td>
<td>150,765</td>
<td>-2,223</td>
<td>-1.5</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Paper and paperboard</strong></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Europe</td>
<td>tonnes</td>
<td>88,365</td>
<td>88,407</td>
<td>89,396</td>
<td>88,949</td>
<td>85,466</td>
<td>-3,483</td>
<td>-3.9</td>
<td>-3.3</td>
</tr>
<tr>
<td>EECCA</td>
<td>tonnes</td>
<td>9,106</td>
<td>9,561</td>
<td>9,507</td>
<td>10,016</td>
<td>10,052</td>
<td>36</td>
<td>0.4</td>
<td>10.4</td>
</tr>
<tr>
<td>North America</td>
<td>tonnes</td>
<td>75,651</td>
<td>75,602</td>
<td>75,037</td>
<td>74,445</td>
<td>71,835</td>
<td>-2,609</td>
<td>-3.5</td>
<td>-5.0</td>
</tr>
<tr>
<td>Total, UNECE region</td>
<td>tonnes</td>
<td>173,123</td>
<td>173,571</td>
<td>173,940</td>
<td>173,410</td>
<td>167,353</td>
<td>-6,056</td>
<td>-3.5</td>
<td>-3.3</td>
</tr>
</tbody>
</table>

**Note:** Sawnwood does not include sleepers through 2016. Wood-based panels do not include veneer production.

**Source:** FAOSTAT, 2020; UNECE/FAO database, 2020.
Forest Products
Annual Market Review 2019-2020