Europe

Europe, consisting of 48 countries and areas (Figure 18), accounts for about 17 percent of global land area but has one-quarter of the world's forest resources, approximately 1 billion hectares, of which 81 percent is in the Russian Federation (Figure 19). Europe has a long tradition of multiple-use forest management with substantial emphasis on the provision of social and environmental services.

DRIVERS OF CHANGE

Demographics

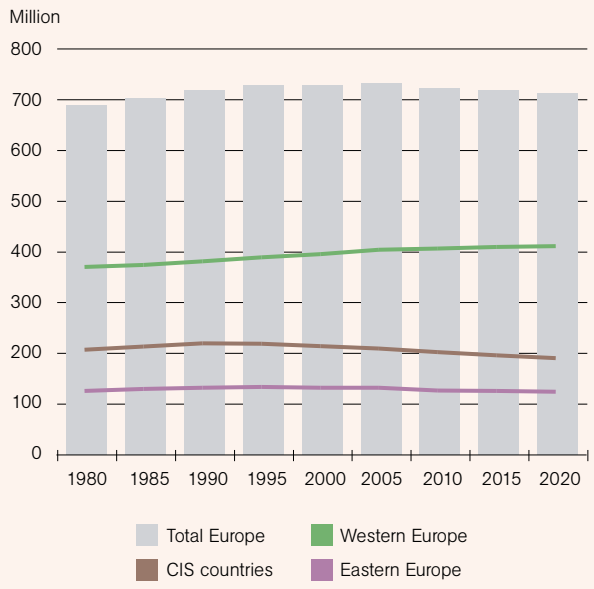
Europe's population is projected to decline from 731 million in 2006 to 715 million in 2020 (Figure 20). This decline, together with the ageing of the population, will have important direct and indirect implications for forests and forestry. Declining labour supply will necessitate continued efforts to develop labour-saving technologies

FIGURE 18 Subregional breakdown used in this report

NOTE: See Annex Table 1 for list of countries and areas by subregion.

FIGURE 19 Extent of forest resources

FIGURE 20 Population



SOURCE: UN, 2008a.

and will encourage increased immigration and shifting production to low-wage economies. Immigration within the region is unlikely to last as wage rates converge.

In Europe, households are becoming smaller, and their number is expected to be 20 percent higher in 2030 than in 2005 – implying continued demand for construction timber, furniture and other wood products (EEA, 2005).

Within the region, population density falls in a gradient from southwest to northeast; most forests are in the less densely populated northern countries. The Russian Federation has only 9 people per square kilometre.

Western Europe is a highly urbanized subregion; more than 75 percent of its population is in urban areas. In some countries, urbanization exceeds 90 percent. However, there may be increased movement to rural areas (particularly mountains and coasts) as the population ages and the quality of life in urban centres declines, and this could increase pressure on forests (EEA, 2005). An increase in the number of healthy and affluent retired people is likely to raise the demand for tourism, potentially in forests.

In general, Eastern European countries and the countries of the Commonwealth of Independent States (CIS) are relatively less urbanized, but political and economic changes are accelerating their pace of urbanization.

Economy

Despite differences among countries, Europe as a whole is characterized by relative economic stability and high income. Per capita income exceeds US$10 000 in all Western European countries, and US$35 000 in several. In contrast, most CIS countries have per capita incomes below US$10 000. The European Union has strengthened the growth of competitive market economies through common policies and the free flow of investments, technology, labour and goods, including forest products.

Economic forecasts suggest that Eastern European countries and the Russian Federation will grow much faster than Western Europe, albeit from a lower base figure (Table 8). The share of agriculture in GDP and employment is very low in Western Europe and is also declining in Eastern European and CIS countries (FAO, 2005b) in view of the faster growth of their manufacturing and services sectors. Land-use conflicts are declining as a result.

High income is reflected in relatively high consumption of forest products and an increasing demand for a broader range of forest-derived goods and services, with a strong emphasis on quality.

TABLE 8
GDP growth projections, 2000–2015

Subregion	**GDP growth** *(%)*
CIS countries	4.9
Eastern Europe	4.4
Western Europe	2.9
Total Europe	**3.4**

SOURCES: Based on UN, 2008b; World Bank, 2007a.

Policies and institutions

Europe has a strong overall political and institutional environment and favourable investment climate. Well-developed political systems have helped in establishing equilibrium between globalization and localization. Civil-society organizations are well developed, and public, private and civil-society organizations generally meet on a level playing field. Forest policies are largely developed through consultative processes.

The enlargement of the European Union and the growing role of the European Parliament in developing common strategies in critical areas have fostered political and institutional strengthening for many countries in the region. The main challenge for the European Union is to balance the different aspirations of its member countries within a common economic and political framework.

Forestry is a relatively minor economic activity in most European countries, hence the impact of policies in other sectors (agriculture, energy, industry, environment and trade) on the forest sector, or the contribution that the forest sector could make to the others, is not always taken into consideration.

Regional initiatives such as the Ministerial Conference on the Protection of Forests in Europe (MCPFE) and the European Commission's European Forestry Strategy provide effective coordination in forestry.

Science and technology

Europe is advanced in science and technology development, a large share of which is directly focused on Europe's most important source of income: high-technology manufacturing. Most Western European countries have a research and development (R&D) outlay of more than 2 percent of GDP (European Commission, 2007). Although the share of agriculture and forestry in the R&D budget is low, these fields benefit from technology developments in other sectors, especially in terms of improving industry practices and enhancing labour productivity. Remote sensing, information and communications technology and improved processing technologies have all benefited the forest sector. Future technological changes in the forest sector will be driven by:

- growing concern about climate change;
- the need to improve energy efficiency and reduce capital intensity;
- the desire for more sustainable forest management and more efficient use of forest resources, including recycling, reuse and conversion into bioenegy;
- focus on customer satisfaction and high-quality niche markets (Houllier *et al.*, 2005).

The European forest products sector will need to develop a new range of high-value-added products to meet the increasing demand for "green materials" and "green energy", to confront increasing competition from alternative materials and electronic media, and to compete with countries that have lower raw-material, energy and labour costs (CEI-Bois, CEPF and CEPI, 2005).

OVERALL SCENARIO

Although there are differences among the subregions, Europe generally presents a favourable situation in terms of social and economic development. Diminishing demographic pressures, moderate economic growth, well-developed political and institutional arrangements, growing concern for protection of the environment and especially for climate change, and high investments in science and technology are facilitating the transition to a knowledge-based postindustrial "green" economy built on the sustainable and equitable use of resources. This transition will take place at different speeds in the various countries.

Where there is strong political commitment to invest in green technologies and strengthen knowledge and skills, the transition will be rapid. However, in countries with lower incomes, environment and sustainability issues will be a low priority and the transition to a postindustrial society will be slower. In many cases, industries will move to countries where production costs are low (and environmental regulations are lax). Investments will continue to focus on improving competitiveness in the traditional sense, and unsustainable use of forests could continue.

OUTLOOK

Forest area

Europe has a relatively high proportion of its land area under forest (second only to Latin America and the Caribbean), which has consistently increased in recent years (Table 9). Growing stock per hectare is slightly lower than the global average but is high in some Western European countries (e.g. Austria and Switzerland) and in Eastern Europe, where, until recently, harvesting has been modest and silvicultural practices have favoured high stock accumulation.

The distinction between natural and planted forests is less clear for Europe than for other regions because much of the original forest cover was removed hundreds of years ago. Much of the region's increasing forest area reflects natural expansion of forests into former agricultural land and the establishment of semi-natural planted forests using native species.

Continued transition to a postindustrial society is expected to reduce pressure on forests, especially in Western Europe. Declining population, low land

TABLE 9
Forest area: extent and change

Subregion	Area (1 000 ha)			Annual change (1 000 ha)		Annual change rate (%)	
	1990	2000	2005	1990–2000	2000–2005	1990–2000	2000–2005
CIS countries	825 919	826 953	826 588	103	–73	0.01	–0.01
Eastern Europe	41 583	42 290	43 042	71	150	0.17	0.35
Western Europe	121 818	128 848	131 763	703	583	0.56	0.45
Total Europe	**989 320**	**998 091**	**1 001 394**	**877**	**661**	**0.09**	**0.07**
World	**4 077 291**	**3 988 610**	**3 952 025**	**–8 870**	**–7 320**	**–0.22**	**–0.18**

NOTE: Data presented are subject to rounding.
SOURCE: FAO, 2006a.

dependence, high income, concern for protection of the environment and a well-developed policy and institutional framework all favour further expansion of forest area. Almost all European countries have laws that make forest clearance and conversion to other land uses extremely difficult. In addition, fiscal support is provided for forestry under the European Agricultural Fund for Rural Development, encouraging significant expansion in tree planting. Thus, the forest area is likely to increase as the extent of land under agriculture decreases.

The major threats to forest resources in Europe are environmental (fires, pest outbreaks and storms); some of these could increase with climate change. Although the long-term impacts of climate change on forests are uncertain, many recent catastrophic events have been attributed to it. Considerable increases are projected in the extent and frequency of fires, for example in the Iberian Peninsula and in the Russian Federation (EEA, 2007).

Forest management

Forest management is influenced by the ownership structure. In Western Europe, 70 percent of forests are privately owned, often by individuals or families. In Eastern Europe, large parts of state forests were returned to their former owners in the 1990s, which increased the proportion of forests under private ownership (UNECE, MCPFE and FAO, 2007). Fragmented ownership among many smallholders raises the complexity and costs of forest management. In many countries, the private sector has responded by forming strong private forest owners' associations and cooperatives. In CIS countries, all forest is state owned.

Fellings in Europe have been lower than the growth in forest resources and have actually declined over several decades. In the future, the ratio of fellings to increment is expected to increase as more wood is harvested to supply the wood industry, as well as reflecting the impact of fast-growing demand for wood as a source of renewable energy.

In most countries, forest management is highly regulated with strict enforcement. State forest organizations play a leading role in forest management as they have significant financial and technical resources. Western European countries tend to adopt intensive high-technology management involving improved planting stock, investments in soil improvements and mechanized harvesting. In Eastern Europe and the CIS subregion, where labour is cheaper, lower-cost management tends to be adopted with few inputs, long rotations and natural regeneration. Many absentee owners and smallholders also adopt this form of management.

A third form of management is traditional multipurpose management, whether carried out by the state (high-intensity multipurpose management) or in small, family-owned forests and farm forests to provide a range of non-wood benefits to their owners or local people. Forests managed in this way have suffered most in terms of economic viability with changing market conditions, i.e.:

- increased global competition resulting in lower product prices and reduced ability of industry to pay for wood and fibre;
- lower roundwood prices owing to the rapid increase in supply following forest restitution in Eastern Europe.

Balancing the economic forces of markets and the growing public demand for environmental and social services of forests will remain the major challenge. High labour costs and the complexity of managing many small fragmented forests make it difficult to meet the high forest management standards, reducing the economic viability of forest management in many countries, especially in Western Europe. There could be a shift towards production of smaller-sized wood grown on shorter rotations.

However, recent increases in demand for wood energy and higher prices could bring about a major shift from a wood-surplus to a wood-deficit situation.

Wood products: production, consumption and trade

Europe produces large amounts of a wide variety of wood products, is a major participant in international trade and has relatively high consumption (Table 10). The region accounted for almost one-third of global production in 2006 and roughly half of global wood products exports.

Western Europe has a major competitive advantage in the production of highly processed products such as reconstituted panels and high-quality paper. Its environmental concerns are reflected in, among others, its status as a major producer and consumer of certified wood products and its high rate of use of recovered fibre. In addition, governments and the private sector are promoting wood products and "green building" for their environmental friendliness.

The Russian Federation accounts for most of the forest industry in the CIS subregion. With its vast forest resources, low labour costs and technically skilled workforce, it has immense potential to regain its former position as a major global producer of wood products (Box 10).

Prior to 1990, Eastern European and CIS countries accounted for nearly half of Europe's sawnwood production. Political changes in the 1990s led to a drastic decline in their production and consumption of sawnwood. With the transition to a market economy, Eastern Europe shifted to production of more processed products such as wood-based panels. Sawnwood production has begun to recover since 2000, but despite predicted growth of 1.7 percent from 2005 to 2020, it will still be less in 2020 than it was in 1990. Consumption is expected to remain relatively flat.

Production and consumption of wood-based panels are roughly equal and are expected to grow faster than those of sawnwood, 2.4 percent annually from 2005 to 2020, because of developments in reconstituted panel technology and substitution of panels for sawnwood.

High growth rates in paper and paperboard production are expected to continue, but with significant subregional differences (Figure 21). Europe's competitive advantage in paper production is based on close high-demand markets, availability of a large quantity of recovered paper and, in particular, technological sophistication for production of high-quality paper. The somewhat lesser competitive advantage of the CIS countries is based on abundant availability of pulpwood. Higher export tariffs in the Russian Federation (Box 10) are likely to stimulate increased pulpwood production in other European

TABLE 10
Production and consumption of wood products

Year	Industrial roundwood (million m^3)		Sawnwood (million m^3)		Wood-based panels (million m^3)		Paper and paperboard (million tonnes)	
	Production	Consumption	Production	Consumption	Production	Consumption	Production	Consumption
2000	483	473	130	121	61	59	100	90
2005	513	494	136	121	73	70	111	101
2010	578	543	147	131	82	79	128	115
2020	707	647	175	151	104	99	164	147

SOURCE: FAO, 2008c.

BOX 10 Recent developments in the forest industry in the Russian Federation

Roundwood production in the Russian Federation was about 150 million cubic metres in 2005, amounting to one-third of all production in Europe and 10 percent of global production. However, this is still only about half the 1990 level. About one-third of the production was exported in 2005, accounting for 40 percent of global trade. The main importers of industrial roundwood from the Russian Federation are China, Finland and Japan.

Recent policies to stimulate domestic forestry include:

- the Forest Code (2007), which encourages private-sector participation in forestry (including through flexible forest lease arrangements) and decentralization of forest management;
- dramatically increased industrial roundwood export tariffs by 2009 (with a temporary two-year exemption for birch pulpwood) (see table).

However, the new policies do not address the scarcity of capital in forestry – caused by the perception of the Russian Federation as a high-risk country for investment and by the concentration of investments in the high-performing oil and gas sector. Thus, despite the advantages of abundant wood, low domestic wood prices (stumpage) and cheap skilled labour, it is unclear whether the policies will have the intended effect.

Year	Russian industrial roundwood export tariffs	
	(€/m^3)	(US$/$m^3$)
1996	4	5
2007	10	14
2008	15	23
2009	50	74

SOURCE: A. Whiteman, unpublished, 2008.

countries, particularly in northern Europe. In Eastern Europe, consumption of paper and paperboard is expected to outpace production, leading to increased imports. In contrast, paper and paperboard consumption in Western Europe is expected to remain flat because of substitution by electronic media.

Exports are high across almost all product sectors (Table 11). However, Europe's share in furniture has declined with the rise of Asia's furniture industry. Much of Europe's wood products trade (including roundwood) is within Europe, between Europe and North America and increasingly with Asia.

Europe is also one of the largest investors in the forest sector in emerging markets, particularly the pulp and paper sector in Asia and Latin America, where European companies benefit from matching their technological, marketing and managerial skills with the low labour costs, rapidly expanding planted forests and growing demand.

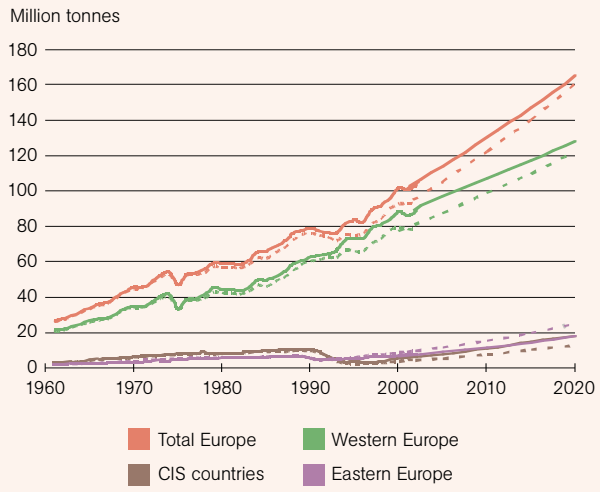
Over time, the differences in forestry development between Eastern and Western Europe are likely to diminish. Western Europe will remain focused on the production of highly processed wood products, supported by a high-technology approach to forest management, while wood production is expected to increase in Eastern Europe.

Woodfuel

The use of wood for energy in Europe became relatively minor after the Second World War. However, since the mid-1990s, the region (particularly the European Union) has introduced policies to increase the share of renewable energy in total energy consumption to combat climate change, meet Kyoto Protocol targets and address concerns about rising fossil fuel prices and energy security (Box 11).

These policies, together with market changes, have stimulated an increasing demand for wood as an energy source, and particularly for wood pellets as a substitute for oil in small-scale heating and electricity production (Box 12). In addition, within 5–10 years, the technology to produce liquid biofuels from wood could begin to be adopted on a commercial scale, which would increase woodfuel demand.

FIGURE 21 Trends and projections for paper and paperboard production and consumption



NOTE: Solid lines represent production and dashed lines represent apparent consumption.
SOURCE: UNECE and FAO, 2005.

BOX 11 European Commission measures to promote renewable energy

- Renewables Directive (2001): sets a target for electricity production from renewable sources of 22.1 percent by 2010
- Biofuels Directive (2003): sets an indicative target for consumption of liquid biofuels of at least 5.75 percent by 2010
- Draft Proposal for Climate Action (to come into force in 2010 if accepted): sets an objective of 20 percent of total energy from renewable sources by 2020 and a minimum target of 10 percent for market share of biofuels by 2020

TABLE 11
Exports as percentage of production and imports as percentage of consumption, 2006

Subregion	Industrial roundwood		Sawnwood		Wood-based panels		Paper and paperboard	
	Exports	Imports	Exports	Imports	Exports	Imports	Exports	Imports
	(%)							
CIS countries	34	1	68	3	27	22	35	28
Eastern Europe	14	8	49	27	45	44	59	67
Western Europe	9	19	46	46	51	48	67	61
Total Europe	**18**	**13**	**51**	**40**	**46**	**43**	**64**	**59**
World	**8**	**8**	**32**	**32**	**32**	**32**	**32**	**32**

SOURCE: FAO, 2008a.

The European Forest Sector Outlook Study (EFSOS) projected woodfuel consumption to 2020 (UNECE and FAO, 2005). However, new projections (Figure 22) are approximately three times higher for Eastern Europe and five times higher for Western Europe than the EFSOS figures, which were based on traditional woodfuel use mostly by households in rural areas (and were underestimated because of the paucity of reliable national statistics).

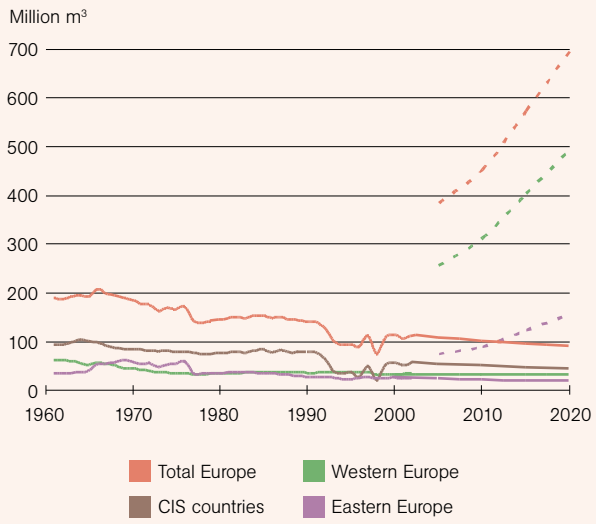
Fellings, thinnings and prunings, recovered wood products, residues from harvesting and processing and biomass from outside forests are all used for energy production. Wood used for energy needs to be fully taken into account in wood balance estimates; Table 12 suggests that when this is done, demand outweighs supply.

Non-wood forest products

Although not a major activity in Europe, the collection of NWFPs is a common form of recreation. Key commercial products include Christmas trees, game meat, cork, mushrooms (including truffles), honey, nuts and berries (Figure 23). Most of these have limited but well-established (and sometimes highly profitable) markets. Two recent developments include a decline in the viability of cork production (because of substitutes) and increased interest in food from forests as part of the growing consumer demand for organic products.

As with wood, European producers and forest managers have continuously adapted their practices to take advantage of the changing market conditions. For example, cork producers have improved marketing and introduced stricter quality controls, standards and certification to compete against substitutes. Producers

FIGURE 22 Trends and projections for woodfuel consumption, revised considering European Union draft renewable energy policy



NOTE: Solid lines are EFSOS projections and dashed lines represent revised projections.
SOURCES: Becker *et al.*, 2007; UNECE and FAO, 2005.

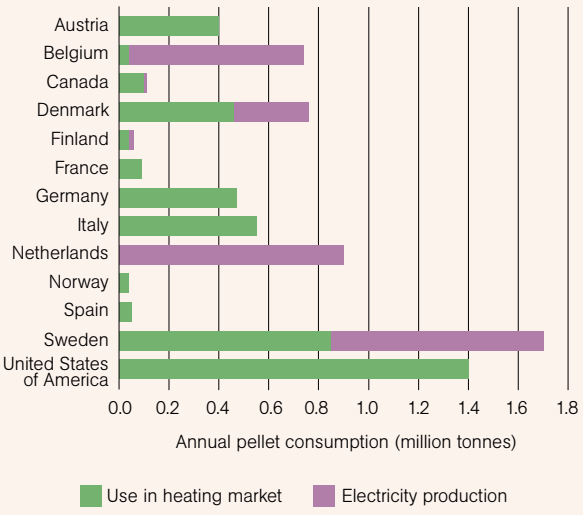
BOX 12 Emerging demand for wood pellets

Since wood pellets emerged in the 1970s as an alternative fuel source, their production and consumption have increased steadily, and new developments in manufacturing technologies have improved their quality. The availability of raw material, competitive prices and diversified energy policies favour the development of the wood pellet industry in Europe. In 2006, the overall production of almost 300 pellet plants in the European Union reached nearly 4.5 million tonnes. Sweden is the world leader in terms of wood pellet production. Sawdust-based pellet production has considerable potential in Brazil and the Russian Federation.

Consumption is also rising for both heating and electricity production (see figure). Globally, wood pellet markets display exponential growth, with new markets opening up in many areas, including Canada and Eastern Europe, and with potential in Asia and Latin America.

Future growth will depend on improved local logistics, a reduction in the cost of pellet stoves and supportive policies.

Wood pellet consumption, 2005, selected countries



SOURCE: Peksa-Blanchard *et al.*, 2007.

TABLE 12

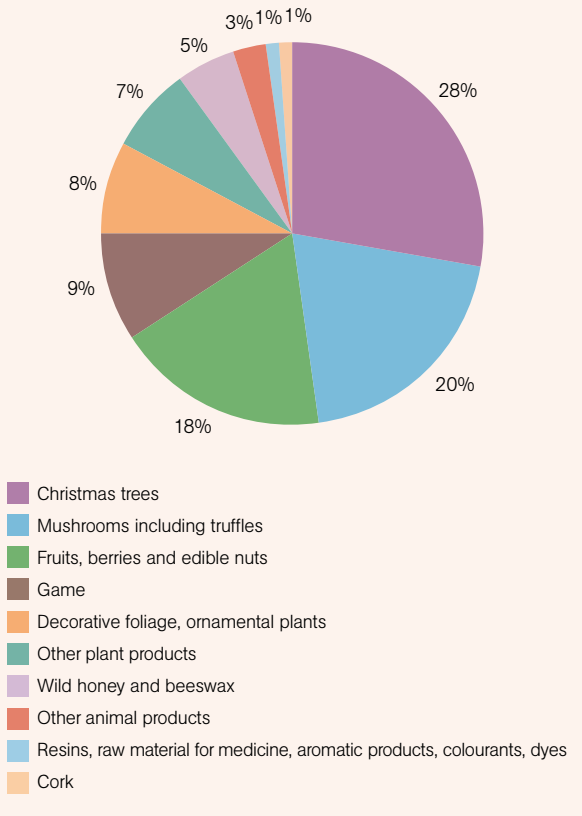
Components of wood supply and consumption, European Union and European Free Trade Association[a] countries, 2005

Supply	Million m³	% of total
From forest		
Industrial roundwood	397	51
Fuelwood	85	11
Bark	25	3
Logging residues	23	3
Woody biomass outside the forest	20	3
Co-products		
Chips, particles and wood residues	118	15
Pulp production co-products	70	9
Post-consumer recovered wood	29	4
Processed woodfuel industry	7	1
Total	**775**	**100**

Use	Million m³	% of total
Material		
Sawmill industry	217	26
Panel industry	88	11
Pulp industry	155	19
Pellets, briquettes, etc.	7	1
Other physical utilization	14	2
Energy		
Power and heat	49	6
Industrial internal	65	8
Private households	92	11
Undifferentiated energy use	135	16
Total	**822**	**100**

[a] Iceland, Liechtenstein, Norway and Switzerland.
NOTE: Data presented are subject to rounding.
SOURCE: Adapted from Mantau *et al.*, 2008.

FIGURE 23 Marketed non-wood forest products in Europe, percentage of total value



NOTE: Based on available information.
SOURCE: UNECE, MCPFE and FAO, 2007.

of forest food products in Eastern Europe have taken advantage of low labour costs to serve the niche market for organic foods. In Western Europe, forest managers are earning income from NWFPs, for example through permits for recreational collection of mushrooms or sale of Christmas trees.

Contribution of forestry to income and employment

After the drastic decline that accompanied the political and economic changes in the early 1990s, gross value added by the forest sector recovered somewhat towards the middle of the decade, but it has continued to diminish since 2000 (Figure 24). Most of the decline has come from the pulp and paper subsector.

Employment in the forest sector has also fallen in absolute and relative terms (Figure 25).

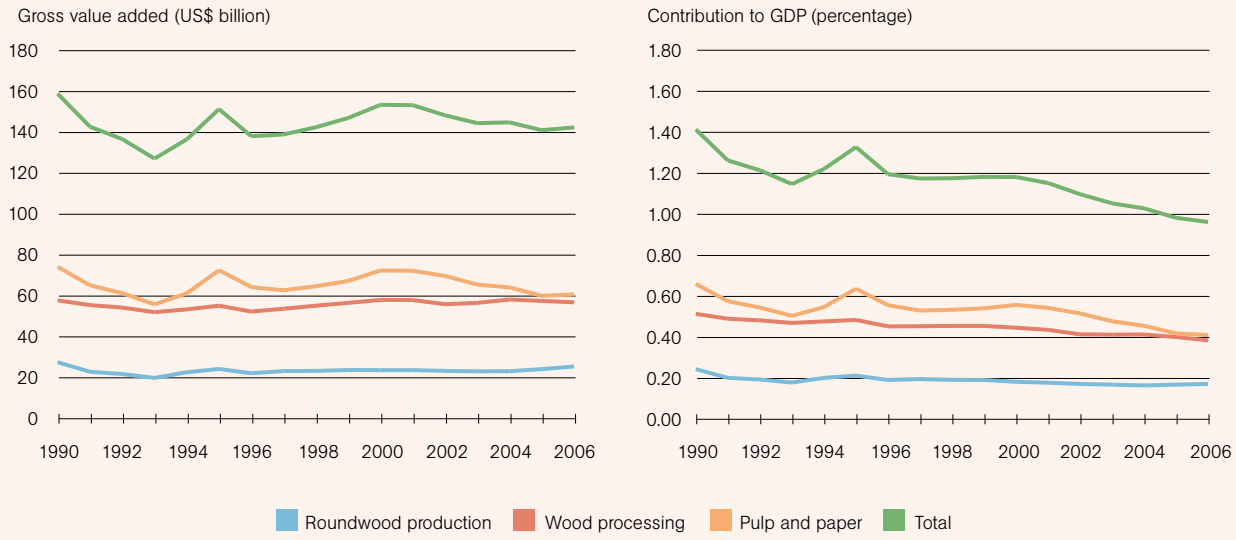
Environmental services of forests

High levels of education and access to information contribute to great concern for protection of the environment in Europe, and high incomes contribute to willingness to pay for environmental services. Land use is highly regulated and forest clearance is virtually prohibited in most of the region, particularly in Western Europe.

Combating climate change is the most important environmental concern. In addition to having an expanding role in providing biomass for renewable energy (see section on woodfuel above), Europe's forests are also valued as a carbon sink. For Europe as a whole, land use, land-use change and forestry reduce net emissions by almost 6 percent, and forests probably account for almost all of this reduction (Table 13). The contribution is particularly high in Eastern Europe, where increment is high and emissions from other sectors are low. Europe has also pioneered market approaches for emission trading.

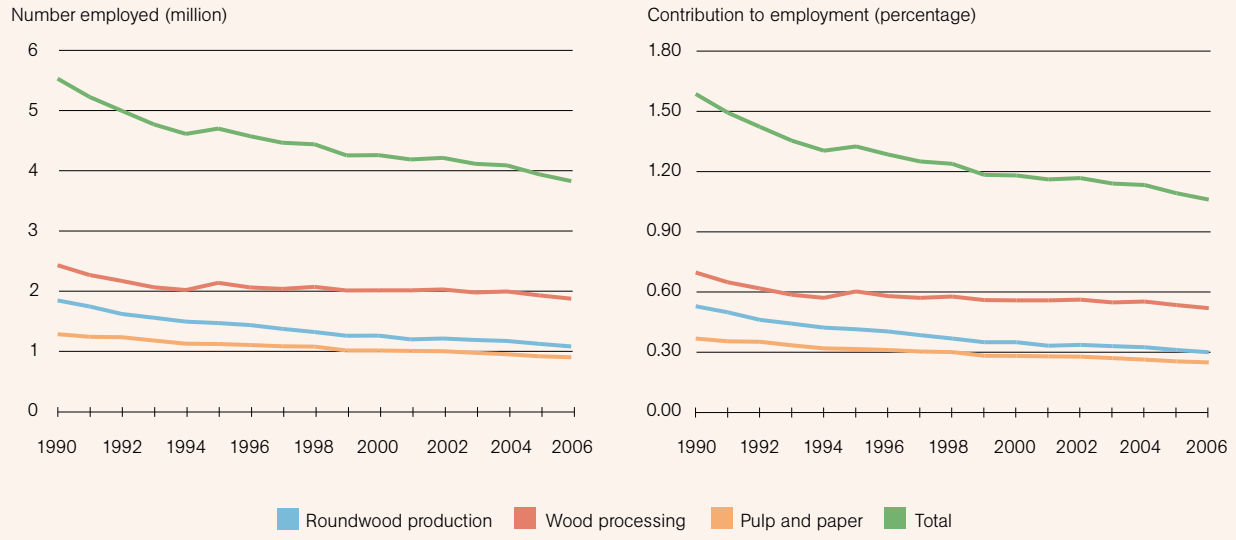
Protected areas in Europe expanded from 195 million hectares in 1990 to 234 million hectares in 2007 (UN, 2008c). There are multiple initiatives for conserving biodiversity in the region (Box 13), although most measures that maintain biodiversity in forests are not specifically earmarked as such. Management practices increasingly emphasize protecting biodiversity through

FIGURE 24 Value added in the forestry sector



NOTE: The changes in value added are the changes in real value (i.e. adjusted for inflation).
SOURCE: FAO, 2008b.

FIGURE 25 Employment in the formal forestry sector



SOURCE: FAO, 2008b.

natural regeneration, mixed forests, leaving dead wood in forests and protecting small "key habitats" in managed forests (UNECE, MCPFE and FAO, 2007). Growing emphasis on "close to nature silviculture" (UNECE, FAO and ILO, 2003) will help to conserve biodiversity in most managed forests.

Integrated management of upland watersheds and the linkages between forests and water are receiving increasing attention in the region. In 2006, the United Nations Economic Commission for Europe (UNECE) Convention on the Protection and Use of Transboundary Watercourses and International Lakes (also known as the Water Convention) endorsed the concept of PES, including the conservation and development of forest cover. In 2007, MCPFE adopted a resolution on forests and water that addresses, among others, policy coordination and economic valuation of water-related forest services. FAO, UNECE, MCPFE and the European Commission highlighted forest–water linkages at European Forest Week in October 2008 (UNECE and FAO, 2008).

TABLE 13
Impact of land use, land-use change and forestry (LULUCF) on net emissions of greenhouse gases, 2005 (as reported to UNFCCC)

Subregion	Total greenhouse gas emissions ($Mt\ CO_2e$)		Contribution of LULUCF to net emissions		Contribution of wood energy to net emissions			Contribution of wood energy and LULUCF	
	Without LULUCF	With LULUCF	Total ($Mt\ CO_2e$)	As % of emissions without LULUCF	Consumption of woodfuel ($million\ m^3$)	Avoided fossil fuel emissions ($Mt\ CO_2e$)	As % of emissions without LULUCF	Total ($Mt\ CO_2e$)	As % of emissions without LULUCF
CIS countries	2 627	2 700	+73	+2.8	56	−22	−0.9	+51	+1.9
Eastern Europe	1 298	1 082	−216	−16.7	76	−30	−2.3	−247	−19.0
Western Europe	4 306	3 966	−340	−7.9	257	−103	−2.4	−443	−10.3
Total Europe	**8 231**	**7 748**	**−484**	**−5.9**	**389**	**−156**	**−1.9**	**−639**	**−7.8**

NOTES: Mt CO_2e = megatonnes CO_2 equivalent. Data presented are subject to rounding.
SOURCE: Mantau *et al.*, 2008.

BOX 13 Ecological networks in Europe

- Pan-European Ecological Network (PEEN): aims to enhance ecological connectivity across Europe by promoting synergies between nature policies, land-use planning and rural and urban development
- Natura 2000: a network of Special Protection Areas for birds and Special Areas of Conservation for other species and habitats, established by European Union legislation and involving up to 20 percent of the European Union's land area
- Emerald Network: initiated under the Convention on the Conservation of European Wildlife and Natural Habitats (also known as the Bern Convention), extends a common approach to the designation and management of protected areas to European countries (non-European Union) not covered by Natura 2000 as well as to Africa

SOURCE: EEA, 2007.

More than 90 percent of European forests are open to public access and the area of forest available for recreation is increasing. Ecotourism is popular. While the demand for forests as recreation areas is expected to increase, the nature of the demand is expected to change, influenced by demographic and income changes (Bell *et al.*, 2007).

The transition to a green economy requires strong demand, and willingness to pay, for forest environmental services. Europe's high income, increasing area of forests and growing focus on multiple-use management with more emphasis on environmental values suggest positive movement in this direction. Multifunctional forestry with a greater focus on the provision of environmental services requires a strengthening of cross-sectoral policy coordination; this remains a challenge in some areas.

SUMMARY

Forest resources in Europe are likely to continue expanding. Fellings will probably remain below increment, and the provision of environmental services will continue as a primary concern, especially in Western Europe. Rules and regulations in this regard will make wood production less competitive in comparison with other regions.

Forest management will continue to serve a wide variety of demands. Economic viability is likely to remain a challenge, especially for small-scale forest owners, but the increased demand for woodfuel could change this.

While the forest industry, especially in Western Europe, may continue to lose competitiveness against other regions in labour-intensive segments, it is likely to retain leadership in the production of technologically advanced products, with much of the forest industry shifting to the production of "green" products.

Within the region, the differences in forestry between Eastern and Western Europe are likely to diminish as Eastern Europe catches up. The impacts of recent developments in the Russian Federation and in promoting wood energy are difficult to predict, and at present are mainly addressed for the short term.