



**EFORWOOD**  
Sustainability Impact Assessment  
of the Forestry - Wood Chain



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EFORWOOD

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## **0. Summary**

This deliverable presents main EFI-GTM inputs and the results of the model calibration for the base period. It describes the model product categories, model regions definitions and the main results for the base year production, trade and consumption of forest products in comparison with actual (statistical) data. The base year results are shown at the EU countries level and at the level of global sub regions. This report is looking into the validation of the EFI-GTM on the base period data, which is 2005 for the EFORWOOD project. This is done by checking consistency of forest wood chain (FWC) material flows, adjusting wood and wood fiber input coefficients and other inputs (energy, labour and other costs) in order to achieve better consistency between simulated and observed variables (production, consumption, trade of wood and wood based products).

Report is looking into the extent and the reasons for the deviations and possible improvements for the future work. In order to improve consistency, at least low estimates of illegal harvests and estimates of unreported harvests should be incorporated into the base year harvest level. This should help to lower observed deficits of wood in most of the Global and EU regions. Trying to improve trade data consistency would be another priority. And the last but not least – material input coefficients should also be checked for possibilities of creating of inconsistencies in the material wood flow balances.

## **1. Introduction**

EFI-GTM is a multiperiodic, spatial, partial equilibrium forest sector model. The main function of the EFI-GTM is to make possible consistent analysis of how and by how much production, consumption, imports, exports, and prices of roundwood and forest industry products may change over time as a consequence of changes in external factors like economic growth, forest biodiversity protection, energy prices, trade regulations, transport costs, forest growth, forest management and consumer preferences.

EFI-GTM model structure has been described in D 1.3.1 (“Documentation of the Forest Sector Model”) and data structure and sources in PD 1.3.2 (“Specification of data requirements and sources”).

The purpose of this report is to describe main data input for the EFI-GTM model (1) corresponding to the base year (2005) forest sector including regions and products specifications, results of the model calibration for the base year, aiming at reasonable reproduction of the base period consumption, trade and production and volume of wood and wood based products.

This report is looking only into the validation of the EFI-GTM on the base period data, which is 2005 for the EFORWOOD project. This is done by checking consistency of forest wood chain (FWC) material flows, adjusting wood and wood fiber input coefficients and other inputs (energy, labour and other costs) in order to achieve better consistency between simulated and observed variables (production, consumption, trade of wood and wood based products).

## **2. EFI-GTM model data inputs**

Production and trade statistics of all world countries was collected from FAOSTAT database (2), which comprises forest products statistics data for some 200 countries. Wood and wood

based products categories are based on the Joint Forest Sector Questionnaire (3). There are about 40 categories of wood and wood based products, most of which are collected in the FAOSTAT “foreSTAT” database.

EFI-GTM is using similar product categories, although there are some differences, most of which are in the “Other paper and paperboard” category (see Annex 1 for comparison of FAO’s and EFI-GTM product categories). In some parts EFI-GTM is using more aggregated products (plywood and veneer sheets are aggregated together for all tree species), and two less common type of fiberboards (insulation boards and hardboards) are aggregated as other fiberboard (besides MDF as the most common type of fiberboard). Wrapping papers (except for sack paper), other papers used mainly for packaging and other papers & paperboards not elsewhere specified are aggregated into “Other papers and paperboards”. On the other hand, coated papers are disaggregated into wood free and wood containing coated papers, case materials are disaggregated into 3 types. The main reason for EFI-GTM product categories differences with FAO’s products is because EFI-GTM products are more homogenous with respect to wood and wood fiber inputs. This is important for the analysis of the FWC material flows.

EFI-GTM is using regional aggregation (see annex #2 for country grouping) to reduce the large number of global regions. In Europe EFI-GTM covers most of the European countries at a country level (except small countries like Cyprus, Malta, Albania, Moldova, Luxemburg). Countries outside of Europe are grouped in sub regions, except biggest producers / consumers of wood based products (USA, Canada, Brazil, China, Japan, and others).

Production statistics in general are more reliable compared to trade data. Production data for EFI-GTM regions were compiled mainly from FAOSTAT database – see annex #3. The main advantage of FAOSTAT is availability of data for all world countries, which are reporting forest products data through the joint forest sector questionnaire. However, quality of these data varies a lot. Generally, European, North American and other developed countries report their forest products statistics mostly reasonably accurately. Developing countries in Latin America, Africa and Asia regions may report their data incompletely. This is a special problem in countries like China and India. Even some inaccuracy in relation to Chinese forest sector statistics may result in serious imbalances in the global FWC. Paper and pulp products statistics are reported better, with the exception of China and some of the other developing countries. Sawnwood statistics can be on average less reliable (due to small sawmills not reporting their production figures), and harvest statistics is a problematic area everywhere because of the fact that some wood may be originating from unknown sources.

Production data for 58 EFI-GTM regions were first gathered from FAOSTAT and then aggregated according to the list of EFI-GTM regions. The resulting production table was then disaggregated for some products with the help of JPC experts: coated papers disaggregated into coated wood free and coated wood containing, case materials into 3 types, and then other papers - carton boards, sack papers (which are reported by FAO as part of wrapping papers), and aggregating the remaining 3 types of other papers together. FAO’s production data were cross checked with JPC’s data.

In order to calculate apparent consumption figures for the base year, trade of wood and wood based products needs to be calculated. For the apparent consumption the calculation of net export / import per region and product is sufficient. However, EFI-GTM also needs base year trade flows, which are used to initialize base year trade for each pair of trading partners and each product. FAOSTAT total imports / exports isn’t sufficient, and FAO’s trade flow database provide data for only a few aggregated wood and wood based products. In order to cover detailed trade flow data between EFI-GTM regions for all EFI-GTM products EFI

Forest Products Trade Flow (FPTF):

[http://www.efi.int/portal/virtual\\_library/databases/forest\\_products\\_trade\\_flow\\_database](http://www.efi.int/portal/virtual_library/databases/forest_products_trade_flow_database)) database was utilized. FPTF database detailed trade flows were aggregated according to the EFI-GTM product categories and for which pair of trading partner information on both exports and imports (reported by both partners) were utilized in order to calculate the resulting net trade flow. The net trade was averaged on the reports of both trading partners' sides, which makes such an approach more consistent compared with traditional approach, when trade report of one reporting partner (exporter or importer) is taken into account. The net imports (+) / exports (-) is shown in the annex # 4.

Annex # 5 shows apparent consumption for 58 EFI-GTM regions and EFI-GTM product categories calculated as production (annex 3) plus net imports (annex 4). A very common problem of apparent consumption calculation is negative consumption, which is due to net export exceeding production figure. In our case, thanks to the use of more consistent trade data, apparent consumption calculation yielded negative apparent consumption only in two cases – other paper & paperboard in Finland and Sweden. Especially in Finland negative consumption of other paper is over 1 million tones. In both case (Sweden and Finland) we used JPC's estimate of other papers consumption in Finland (111 thousand tones) and Sweden (129 thousand tons). Consumption figures of other paper & paperboard in other regions have been also revised with JPC's experts help. The main problem is misclassification of other paper product categories codes, which are not always defined well enough in the Harmonized System Codes. See final adjusted consumption figures in the annex 6.

### **3. Base year (2005) model calibration results**

The main purpose of the base year model calibration is to check that the model sufficiently reproduces base year consumption, production of wood (harvest) and wood based products and trade. Forest products demand for the base year is the model input; however the EFI-GTM model simulates so-called market equilibrium for each year subsequently, starting from the base year. Under market equilibrium, demand for all products in all modeled regions is equal to the supply (production plus trade). The EFI-GTM model finds a global equilibrium, where world regions find their local market equilibrium with the help of the global trade, which involves trade between each possible pair of regions for each wood based products including wood (sawlog, pulpwood, chips). Regions tend to import or export their products, if this is more profitable to do so. Profitability or costs of producing and / or trading wood and wood products is dependent on costs of wood delivered to the mill gate (see annex #7 for assumed mill gate wood prices) and wood products manufacturing costs. Manufacturing costs are defined through wood and wood fiber inputs (amount of wood or wood fiber per unit of product output), labour, electricity, fuel and other costs (see annex # 8 for sample input / costs data).

Model input data aren't perfect in terms of quality and consistency, and EFI-GTM (as any model in general) itself is just a (to some degree) simplified model of some parts of the real world. Therefore, it would be unreasonable to expect, that it can model the real world with high level of details and with perfect accuracy. However, it is expected that the model can show some reasonable accuracy at certain levels.

Annex #9 shows EFI-GTM model calculation for the demand of EFI-GTM wood products at the level of global sub regions (mostly at continental level, except for Europe, where EU, Russia and the other (rest of) Europe are separated).

Region	Graphic papers	Other papers & paperboards	Paper & boards	Sawnwood	Wood based panels	
AFRICA	2,405	3,201	5,605	13,979	3,193	<b>STATISTICS</b>
ASIA	49,763	82,657	132,420	77,809	88,986	
LATIN AMERICA	6,883	14,666	21,550	36,188	9,727	
NORTH AMERICA	40,450	57,171	97,621	157,460	69,787	
OCEANIA	2,663	2,655	5,317	7,724	2,876	
EU+	43,846	47,587	91,433	110,868	63,406	
RUSSIA	1,344	3,454	4,798	7,324	6,895	
REST EUROPA	816	1,502	2,318	4,304	3,226	
GLOBAL	148,169	212,892	361,062	415,657	248,096	
AFRICA	2,473	3,231	5,704	14,164	3,219	
ASIA	51,224	83,358	134,582	78,007	89,248	
LATIN AMERICA	7,081	14,773	21,854	36,982	9,797	
NORTH AMERICA	41,435	57,820	99,255	158,342	69,356	
OCEANIA	2,726	2,663	5,389	7,743	2,895	
EU+	43,105	48,538	91,644	111,522	64,098	
RUSSIA	1,381	3,496	4,877	7,453	6,998	
REST EUROPA	837	1,564	2,401	4,369	3,240	
GLOBAL	150,261	215,444	365,705	418,581	248,851	

Table 1. Modeled (2005) consumption of main categories of wood based products versus 2005 actual consumption (constructed from FAOSTAT production figures, UN COMTRADE trade figure from EFI FPTF database).

Table 1 is a summary of the more detailed table from annex 9. The model calculation has some minor upward bias in most cases, which is due to more aggregated representation of the real industry manufacturing supply curve with only 1-3 type of technologies (low, average and high costs). The most expensive production costs mills aren't presented with few technology vintages, which lead to underestimating production costs for some part of the supply curves. The latter becomes critical in some cases, since equilibrium prices and quantities are determined by the last most expensive mills, which costs are still covered by market price.

Annex 10 shows EFI-GTM model calculation for the production of EFI-GTM wood products at the level of global sub regions.

Region	Graphic papers	Other papers & paperboards	Paper & boards	Sawnwood	Wood based panels	
AFRICA	1,208	3,665	4,874	8,984	2,522	<b>STATISTICS</b>
ASIA	46,325	79,204	125,528	57,198	88,973	
LATIN AMERICA	5,185	12,488	17,673	41,914	13,829	
NORTH AMERICA	40,982	62,476	103,458	157,206	62,370	
OCEANIA	1,525	3,427	4,952	9,035	4,129	
EU+	49,693	51,220	100,913	112,023	64,723	
RUSSIA	2,569	4,556	7,125	22,033	8,015	
REST EUROPA	132	1,519	1,651	7,852	3,161	

GLOBAL	147,619	218,555	366,174	416,244	247,722	<b>MODEL</b>
AFRICA	1,366	3,632	4,998	10,769	2,878	
ASIA	47,625	77,199	124,824	54,510	88,661	
LATIN AMERICA	5,729	12,218	17,947	44,059	14,025	
NORTH AMERICA	41,230	62,200	103,430	158,029	62,296	
OCEANIA	1,578	2,930	4,508	8,316	4,896	
EU+	49,638	51,246	100,884	112,293	64,872	
RUSSIA	2,930	4,515	7,445	23,906	8,601	
REST EUROPA	170	1,531	1,701	6,699	2,640	
GLOBAL	150,266	215,471	365,737	418,582	248,869	

Table 2. Modeled (2005) production of main categories of wood based products versus 2005 actual production (mainly from FAOSTAT production).

Table 2 is a summary of the more detailed table from annex 10. Accuracy of the production volumes at the global sub regions and for aggregated product level is rather good with just few minor exceptions (sawnwood in Africa and rest of Europe, which is mostly represented by Ukraine and Belorussia, where availability and reliability of data for forest sector is extremely limited. It is worthwhile mentioning that overall EU figures match very well, since forest sector statistics are rather good for the most EU countries and special attention was also given in the project during collection of data.

Annex 11 shows EFI-GTM model calculation for the net trade of EFI-GTM wood products at the level of global sub regions. Table 3 is a summary from this Annex. Accuracy of the EFI-GTM net trade flows at the aggregated level is also rather good; however it is somewhat lower compared to the accuracy of the consumption and production figures. This is partly due to the fact that net trade volumes are relatively smaller compared to consumption / production volume flows, and for the smaller trade flows it is more difficult to reproduce the actual flows with the same accuracy. It is especially visible for small net importing or exporting regions, where small net import flow could easily become net export and other way around.

Region	Graphic papers	Other papers & paperboards	Paper & boards	Sawnwood	Wood based panels	
AFRICA	(1,196)	465	(731)	(4,995)	(671)	<b>STATISTICS</b>
ASIA	(3,438)	(3,453)	(6,891)	(20,611)	(13)	
LATIN AMERICA	(1,698)	(2,179)	(3,877)	5,726	4,102	
NORTH AMERICA	532	5,305	5,837	(254)	(7,417)	
OCEANIA	(1,138)	772	(365)	1,311	1,253	
EU+	5,848	3,633	9,480	1,154	1,317	
RUSSIA	1,225	1,102	2,327	14,709	1,120	
REST EUROPA	(684)	18	(667)	3,548	(65)	
Region						
AFRICA	(1,107)	401	(706)	(3,395)	(341)	<b>MODEL</b>
ASIA	(3,599)	(6,159)	(9,758)	(23,496)	(587)	

LATIN AMERICA	(1,352)	(2,555)	(3,907)	7,077	4,229
NORTH AMERICA	(205)	4,380	4,175	(313)	(7,061)
OCEANIA	(1,148)	267	(881)	573	2,002
EU+	6,532	2,708	9,240	771	774
RUSSIA	1,549	1,019	2,568	16,453	1,603
REST EUROPA	(667)	(34)	(700)	2,330	(600)

Table 3. Modeled (2005) net trade of main categories of wood based products versus 2005 actual net trade.

Annex # 12 shows how the model reproduced base year consumption in the EU region compared to the actual 2005 consumption figures. Similarly to table 1 and the table in Annex 9 there is a very small upward bias in the 2005 calculated consumption level in most cases. Otherwise consumption calculations for the base year are rather accurate even at the EU country level and for the detailed EFI-GTM product categories.

Computed base year production in EU countries compared to the actual 2005 data is shown in annex #13. Figures at the detailed country level and aggregated product category level or other way around – at the detailed product category level but aggregated at the EU level are rather accurate – often around 1% deviation and not more 5% deviation in most cases. However, the most detailed level – at the detailed product category and detailed country level tend to be less accurate, and some time, especially for small producers deviates around 20-25%. For small producer it is more difficult to achieve good accuracy. This is due to many reasons - small producer's data (including statistical volumes and production efficiency figures) are less accurate, efficiency of small mills is usually lower and their production figures could easily be lower, because for the bigger producers with higher efficiency the model could easily increase their production volumes by just a tiny figure and compensate reduced production in small producer countries.

However, it can also be a problem in a big producer country to achieve good accuracy for each of the detailed product category. For instance, actual total for the printing and writing papers volume is 8.2 Million tons in 2005 according to FAOSTAT and JPC's estimate. EFI-GTM model calculated 7.74 Million tons for 2005, which deviates about 5% from the actual figure. However, deviations for four printing and writing paper categories are much more substantial. It has to be pointed out, that statistics only provided three product categories for printing and writing paper. Coated papers were reported only for the total, and the split between coated mechanical paper (based primarily on mechanical pulp) and coated wood free (based on chemical pulp) was based on JPC's estimates. More than half of coated papers in Germany were of coated mechanical type. EFI-GTM fails to reproduce sufficient volumes of coated mechanical paper and to lesser extent also uncoated mechanical paper. On the other extent EFI-GTM compensate underproduction of mechanical papers by overproduction of uncoated wood free paper (based on chemical pulp which is largely imported into Germany from abroad). The reason for these can be explained by the wood and wood fiber material balance for Germany. While wood free and other paper grades relying on chemical pulp are not constrained in the base year by availability of chemical pulp (thanks to large imports), mechanical paper grades has to rely mostly on domestically harvested pulpwood together with import of logs and chips (about 1.7 Million all together including sawlogs, pulpwood and chips), since very little mechanical pulp is traded. Sawmilling residues can also be used for pulping, but they are needed in large volumes for production of wood based panels. At the



end the demand for pulpwood and chips is substantially larger than total supply (domestic harvest plus imports and availability of wood residues from sawmills). Because availability of pulpwood and chips is severely limited, the production of paper grades based on mechanical pulp could not be increased to match actual 2005 volumes.

#### 4. Discussion

There are possible solutions to problems described in the previous section, but the best option is hard to choose because of the limited availability of detailed and consistent data. The easiest one to start would be to change coated papers distribution between wood free and mechanical in favor of wood free coated papers, but there are no hard statistical data, except JPC estimate and possibly other consultancy estimates. This would however, may have only a limited effect of reducing of the strain on pulpwood and chips availability, since the overall demand for this wood is rather large thanks to large volumes of wood based panels production. It is very likely that the major problem lays around two possible sources of additional availability of pulpwood. One is incorrectly reported or unreported trade flows. According to the EFI's FPTF database (based on UN COMTRADE) the net imports of industrial roundwood with chips and residues into Germany is about 1.7 Millions m<sup>3</sup>, whereas according to FAOSTAT Germany's net export of logs and chips is over 6 Million m<sup>3</sup>! If we were to adopt FAO's trade figures – this would result in nearly 8 Million m<sup>3</sup> additional wood deficit! Even 1.7 Million m<sup>3</sup> estimate of net import into Germany (instead of large net export) could be still underestimated, because there are no custom offices between EU countries, and some of the trade flows of wood between neighboring EU countries could be unreported. This is a grey area – and there are no data or estimates available to cover this gap. The other possible sources are unreported small scale harvest (which is not always reported or does not need to be reported depending on the country laws and regulations) and possible illegally harvested wood from some of the former Eastern European countries. However, in this area we can only deal with some sort of “expert” guesstimates, which are rather inaccurate.

The German example shows the most problematic area – wood harvest and trade statistics. Annex 14 shows the comparison of the FAOSTAT most recent historical industrial roundwood harvest data (2003-2008), 2005 industrial roundwood harvest level without other industrial roundwood (telegraph, mining poles, etc.), 5 years average (2003-2007) harvest level and the EFI-GTM respective harvest for sawlogs and pulpwood for the base year (2005). The last two numerical columns show the wood deficit (-) / surplus (+) percentage relative to 5 years average level and the 2005 single year level. It should be noted that the harvest level is going up and down from year to year depending on economy growth and other factors like windfall. 2005 in particular shows the highest harvest level, and calculating an average for a number of years surrounding 2005 would be a more appropriate approach. In Sweden alone about 30 Million m<sup>3</sup> additional industrial roundwood was harvested due to windfall after storm Gudrun in January 2005. However, extra wood harvested didn't result in substantially higher wood based products production or more wood trade from Sweden to other European countries. Extra wood may be stored in the forest for a while, and then extra trade to neighboring countries (Finland, Norway, Denmark, and Germany) may not be reported. Taking 30 Million m<sup>3</sup> extra into account of the EU wood balance will help to eliminate overall EU wood deficit. However, if this can't be properly counted in the trade flows of wood across EU, then Sweden stays with large wood surplus and many others stay with wood deficit. EFI-GTM model is solving these imbalances by extra wood trade between countries (+/- 15% trade volume is allowed to change from the 2005 base trade volumes). If more strict trade inertia parameter is enforced, then it will result in higher wood deficit in some countries. Majority of main wood producing countries in EU shows some wood deficit (few percent in Germany, Finland and France). These few percent when multiplied by base

harvest level result in a few Million m<sup>3</sup> wood deficit. Some other smaller wood producing countries may have higher percentage of wood deficit (Baltic countries, Romania), multiplying by base harvest level will result in some substantial wood deficit as well. Some of it (like the latter case) may be suspected to be covered from sources of illegal wood, whereas other cases like Germany, France, Finland may probably be explained by unreported trade from other EU countries and also unreported small scale harvest. The Russian wood deficit figure corresponds rather well to the more conservative estimates of the extent of the illegal logging (10-15%). Very high wood deficit in other European countries (mainly Ukraine, Belorussia, Serbia, Croatia) could be explained only partly by possible involvement of illegal wood, the other part is due to low consistency and quality of data. The overall global wood deficit is between 2 to 5% which is below low estimates of illegal level harvest (4).

## 5. Conclusion

In order to improve consistency, at least low estimates of illegal harvests and estimates of unreported harvests by the recent UN ECE / FAO Wood resource availability and demand study (5) should be incorporated into the base year harvest level. This should help to lower observed deficits of wood in most of the Global and EU regions. Trying to improve trade data consistency would be another priority. And the last but not least – material input coefficients should also be checked for possibilities of creating of inconsistencies in the material wood flow balances.

## 6. Acknowledgements

EFI-GTM model data input was largely supported by Pöyry Forest Industry Consulting Oy for various model input areas (wood fiber, labour, energy and other inputs for pulp & paper and other wood based products, complementing consumption & production statistics, wood and wood based product prices for major markets).

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## Annex 1

## Comparison of product categories between the EFI-GTM and FAO/UNECE (3).

FAO Product	EFI-GTM	Comments
ROUNDWOOD		
WOOD FUEL, INCLUDING WOOD FOR CHARCOAL	N.A.	Not modelled directly - exogenous assumptions are used
INDUSTRIAL ROUNDWOOD (WOOD IN THE ROUGH)		
Coniferous	CSLOG	
Non-Coniferous	NSLOG	
of which:Tropical	N.A.	Tropical is counted as part of Non-Coniferous industrial roundwood
WOOD CHARCOAL	N.A.	
WOOD CHIPS AND PARTICLES	CHIPS	
WOOD RESIDUES	CHIPS	
SAWNWOOD		
Coniferous	CSAWN	
Non-Coniferous	NSAWN	
of which:Tropical	N.A.	Tropical sawnwood is counted as part of Non-Coniferous sawnwood
WOOD-BASED PANELS		
VENEER SHEETS	N.A.	Counted together with plywood
Coniferous	N.A.	
Non-Coniferous	N.A.	
of which:Tropical	N.A.	
PLYWOOD	PLYW	No tree species distinction
Coniferous	PLYW	
Non-Coniferous	PLYW	
of which:Tropical	PLYW	
PARTICLE BOARD (including OSB)	PART	
of which: OSB	OSB	
FIBREBOARD		
MDF (Medium Density)	MDF	
HARDBOARD	HBRD	
INSULATING BOARD	HBRD	
WOOD PULP		
MECHANICAL		Specified as direct wood input
SEMI-CHEMICAL		Specified as direct wood input
CHEMICAL		251.4 251.5
SULPHATE UNBLEACHED	UKP	
SULPHATE BLEACHED	BHKP	Hardwood kraft pulp
SULPHATE BLEACHED	BSKP	Softwood kraft pulp
SULPHITE UNBLEACHED	SI	
SULPHITE BLEACHED	SI	
DISSOLVING GRADES	N.A.	Not modelled
OTHER PULP	N.A.	
PULP FROM FIBRES OTHER THAN WOOD	N.A.	specified as fixed part of other costs
RECOVERED FIBRE PULP		
RECOVERED PAPER	ONP	Old newspaper
RECOVERED PAPER	OCC	Old corrugated paper
RECOVERED PAPER	HIGH	High grade paper (white office paper)
RECOVERED PAPER	MIXED	Mixed recycled paper
PAPER AND PAPERBOARD		
GRAPHIC PAPERS		
NEWSPRINT	NEWS	
UNCOATED MECHANICAL	UWC	
UNCOATED WOODFREE	UWF	
COATED PAPERS	CWC	Coated wood containing
COATED PAPERS	CWF	Coated wood free
SANITARY AND HOUSEHOLD PAPERS	TISSUE	
PACKAGING MATERIALS		
CASE MATERIALS	LINER	Kraft Liner
CASE MATERIALS	NSSC	Semichemical fluting
CASE MATERIALS	RLIFU	Recycled based fluting and testliner
FOLDING BOXBOARD	PCART	Carton
WRAPPING PAPERS	SACK	Sack paper
WRAPPING PAPERS	OTHPB	Wrapping papers (other than sack),
OTHER PAPERS MAINLY FOR PACKAGING	OTHPB	other papers mainly for packaging and
OTHER PAPER AND PAPERBOARD N.E.S	OTHPB	other papers N.E.S. are summed up as Other Paper and Paperboard

**Annex 2.**  
**EFI-GTM regions / country listing**

Order	Sub Region	EFI-GTM region	Reporting Country
1	Africa	AFRES	Comoros
2	Africa	AFRES	Djibouti
3	Africa	AFRES	Eritrea
4	Africa	AFRES	Ethiopia
5	Africa	AFRES	Kenya
6	Africa	AFRES	Madagascar
7	Africa	AFRES	Mauritius
8	Africa	AFRES	Seychelles
9	Africa	AFRES	Somalia
10	Africa	AFRES	Sudan
11	Africa	AFRES	Uganda
12	Africa	AFRNO	Algeria
13	Africa	AFRNO	Egypt
14	Africa	AFRNO	Libya
15	Africa	AFRNO	Morocco
16	Africa	AFRNO	Tunisia
17	Africa	AFRNO	Westn Sahara
18	Africa	AFRSO	Angola
19	Africa	AFRSO	Botswana
20	Africa	AFRSO	Lesotho
21	Africa	AFRSO	Malawi
22	Africa	AFRSO	Mozambique
23	Africa	AFRSO	Namibia
24	Africa	AFRSO	South Africa
25	Africa	AFRSO	Swaziland
26	Africa	AFRSO	Tanzania
27	Africa	AFRSO	Zambia
28	Africa	AFRSO	Zimbabwe
29	Africa	AFRWC	Cameroon
30	Africa	AFRWC	Congo
31	Africa	AFRWC	Gabon
32	Africa	AFRWC	Ghana
33	Africa	AFRWC	Benin
34	Africa	AFRWC	Burkina Faso
35	Africa	AFRWC	Burundi
36	Africa	AFRWC	Cape Verde
37	Africa	AFRWC	Cent Afr Rep
38	Africa	AFRWC	Chad
39	Africa	AFRWC	Cote d Ivoire
40	Africa	AFRWC	Dem Rp Congo
41	Africa	AFRWC	Eq Guinea
42	Africa	AFRWC	Gambia
43	Africa	AFRWC	Guinea
44	Africa	AFRWC	Guineabissau
45	Africa	AFRWC	Liberia
46	Africa	AFRWC	Mali
47	Africa	AFRWC	Mauritania
48	Africa	AFRWC	Niger
49	Africa	AFRWC	Nigeria

50	Africa	AFRWC	Rwanda
51	Africa	AFRWC	Sao Tome Prn
52	Africa	AFRWC	Senegal
53	Africa	AFRWC	Sierra Leone
54	Africa	AFRWC	Togo
55	Africa	RESTW	Br Ind Oc Tr
56	Africa	RESTW	Ex-Ethiopia
57	Africa	RESTW	Mayotte
58	Africa	RESTW	Reunion
59	Africa	RESTW	St Helena
60	Asia & Pacific	ASTRL	Australia
61	Asia & Pacific	CHINA	China M
62	Asia & Pacific	INDIA	India
63	Asia & Pacific	INDON	Indonesia
64	Asia & Pacific	JAPAN	Japan
65	Asia & Pacific	KOREA	Korea Rep
66	Asia & Pacific	MALAY	Malaysia
67	Asia & Pacific	NEWZL	New Zealand
68	Asia & Pacific	MEAST	Afghanistan
69	Asia & Pacific	MEAST	Bahrain
70	Asia & Pacific	SEAST	Bangladesh
71	Asia & Pacific	SEAST	Bhutan
72	Asia & Pacific	SEAST	Brunei Darsm
73	Asia & Pacific	SEAST	Cambodia
74	Asia & Pacific	MEAST	Iran
75	Asia & Pacific	MEAST	Iraq
76	Asia & Pacific	MEAST	Israel
77	Asia & Pacific	MEAST	Jordan
78	Asia & Pacific	RESTW	Korea D P Rp
79	Asia & Pacific	MEAST	Kuwait
80	Asia & Pacific	SEAST	Laos
81	Asia & Pacific	MEAST	Lebanon
82	Asia & Pacific	SEAST	Maldives
83	Asia & Pacific	RESTW	Mongolia
84	Asia & Pacific	SEAST	Myanmar
85	Asia & Pacific	SEAST	Nepal
86	Asia & Pacific	MEAST	Oman
87	Asia & Pacific	MEAST	Pakistan
88	Asia & Pacific	SEAST	Philippines
89	Asia & Pacific	MEAST	Qatar
90	Asia & Pacific	MEAST	Saudi Arabia
91	Asia & Pacific	SEAST	Singapore
92	Asia & Pacific	SEAST	Sri Lanka
93	Asia & Pacific	MEAST	Syria
94	Asia & Pacific	THAIL	Thailand
95	Asia & Pacific	MEAST	Unit Arab Em
96	Asia & Pacific	SEAST	Viet Nam
97	Asia & Pacific	MEAST	Yemen
98	Asia & Pacific	RESTW	Amer Samoa
99	Asia & Pacific	RESTW	China T
100	Asia & Pacific	RESTW	Christmas Is
101	Asia & Pacific	RESTW	Cocos Is

102	Asia & Pacific	RESTW	Cook Islands
103	Asia & Pacific	RESTW	East Timor
104	Asia & Pacific	RESTW	Ex-Pacific Is
105	Asia & Pacific	RESTW	Fiji
106	Asia & Pacific	RESTW	Fr Polynesia
107	Asia & Pacific	RESTW	Guam
108	Asia & Pacific	RESTW	Hong Kong
109	Asia & Pacific	RESTW	Kiribati
110	Asia & Pacific	RESTW	Macau
111	Asia & Pacific	RESTW	Marshall Is
112	Asia & Pacific	RESTW	Micronesia
113	Asia & Pacific	RESTW	N Mariana Is
114	Asia & Pacific	RESTW	Nauru
115	Asia & Pacific	RESTW	Neutral Zone
116	Asia & Pacific	RESTW	Newcaledonia
117	Asia & Pacific	RESTW	Niue
118	Asia & Pacific	RESTW	Norfolk Is
119	Asia & Pacific	RESTW	Palau
120	Asia & Pacific	RESTW	Palestine
121	Asia & Pacific	RESTW	Papua N Guin
122	Asia & Pacific	RESTW	Pitcairn
123	Asia & Pacific	RESTW	Samoa
124	Asia & Pacific	RESTW	Solomon Is
125	Asia & Pacific	RESTW	Tokelau
126	Asia & Pacific	RESTW	Tonga
127	Asia & Pacific	RESTW	Tuvalu
128	Asia & Pacific	RESTW	US Misc Pac Is
129	Asia & Pacific	RESTW	Vanuatu
130	Asia & Pacific	RESTW	Wake Is
131	Asia & Pacific	RESTW	Wallis Fut I
132	Asia & Pacific	RESTW	Yemen Dem
133	Asia & Pacific	TURKE	Turkey
134	CIS	BELRU	Belarus
135	CIS	MOLDO	Moldova Rep
136	CIS	REURO	Armenia
137	CIS	MEAST	Azerbaijan
138	CIS	REURO	Georgia
139	CIS	MEAST	Kazakhstan
140	CIS	MEAST	Kyrgyzstan
141	CIS	MEAST	Tajikistan
142	CIS	MEAST	Turkmenistan
143	CIS	MEAST	Uzbekistan
144	CIS	REURO	Ex-USSR
145	CIS	RUSER	Russian Fed
146	CIS	UKRAI	Ukraine
147	EU	AUSTR	Austria
148	EU	BELGI	Belgium
149	EU	BULGA	Bulgaria
150	EU	CZECH	Czech Rep
151	EU	DENMA	Denmark
152	EU	ESTON	Estonia
153	EU	FINLA	Finland

154	EU	FRANC	France
155	EU	GERMA	Germany
156	EU	GREEC	Greece
157	EU	HUNGA	Hungary
158	EU	IRLAN	Ireland
159	EU	ITALY	Italy
160	EU	LATVI	Latvia
161	EU	LITHU	Lithuania
162	EU	NETHL	Netherlands
163	EU	POLAN	Poland
164	EU	PORTU	Portugal
165	EU	REURO	Belgium-Lux
166	EU	REURO	Cyprus
167	EU	REURO	Ex-Czechoslovakia
168	EU	REURO	Germany FR
169	EU	REURO	Germany NL
170	EU	REURO	Luxembourg
171	EU	REURO	Malta
172	EU	ROMAN	Romania
173	EU	SLOVK	Slovakia
174	EU	SLOVN	Slovenia
175	EU	SPAIN	Spain
176	EU	SWEDE	Sweden
177	EU	UKING	UK
178	Europe	BOSHE	Bosnia Herzg
179	Europe	SERBI	Montenegro
180	Europe	SERBI	Serbia
181	Europe	SERBI	Serbia And Montenegro
182	Europe	CROAT	Croatia
183	Europe	NORWA	Norway
184	Europe	REURO	Albania
185	Europe	REURO	Andorra
186	Europe	REURO	Ex-Yugoslavia
187	Europe	REURO	Faeroe Is
188	Europe	REURO	Fmr Yug Rep Mac
189	Europe	REURO	Gibraltar
190	Europe	REURO	Greenland
191	Europe	REURO	Iceland
192	Europe	SWITZ	Switzerland
193	Latin Am & Carib	BRAZL	Brazil
194	Latin Am & Carib	CHILE	Chile
195	Latin Am & Carib	RLAME	Anguilla
196	Latin Am & Carib	RLAME	Antigua-Barb
197	Latin Am & Carib	RLAME	Aruba
198	Latin Am & Carib	RLAME	Barbados
199	Latin Am & Carib	RLAME	Belize
200	Latin Am & Carib	RLAME	Bermuda
201	Latin Am & Carib	RLAME	Br Virgin Is
202	Latin Am & Carib	RLAME	Cayman Is
203	Latin Am & Carib	RLAME	Cuba
204	Latin Am & Carib	RLAME	Dominica
205	Latin Am & Carib	RLAME	Falkland Is

206	Latin Am & Carib	RLAME	Fr Guiana
207	Latin Am & Carib	RLAME	Grenada
208	Latin Am & Carib	RLAME	Guadeloupe
209	Latin Am & Carib	RLAME	Guyana
210	Latin Am & Carib	RLAME	Haiti
211	Latin Am & Carib	RLAME	Martinique
212	Latin Am & Carib	RLAME	Montserrat
213	Latin Am & Carib	RLAME	Neth Antiles
214	Latin Am & Carib	RLAME	Nicaragua
215	Latin Am & Carib	RLAME	St Kitts Nev
216	Latin Am & Carib	RLAME	St Lucia
217	Latin Am & Carib	RLAME	St Pier Mq
218	Latin Am & Carib	RLAME	St Vincent G
219	Latin Am & Carib	RLAME	Suriname
220	Latin Am & Carib	RLAME	Turks Caicos
221	Latin Am & Carib	RLAME	US Virgin Is
222	Latin Am & Carib	ARGEN	Argentina
223	Latin Am & Carib	RLAME	Bahamas
224	Latin Am & Carib	RLAME	Bolivia
225	Latin Am & Carib	RLAME	Columbia
226	Latin Am & Carib	RLAME	Costa Rica
227	Latin Am & Carib	RLAME	Dominican Rp
228	Latin Am & Carib	RLAME	Ecuador
229	Latin Am & Carib	RLAME	El Salvador
230	Latin Am & Carib	RLAME	Guatemala
231	Latin Am & Carib	RLAME	Honduras
232	Latin Am & Carib	RLAME	Jamaica
233	Latin Am & Carib	MEXIC	Mexico
234	Latin Am & Carib	RLAME	Panama
235	Latin Am & Carib	RLAME	Paraguay
236	Latin Am & Carib	RLAME	Peru
237	Latin Am & Carib	RLAME	Trinidad Tbg
238	Latin Am & Carib	RLAME	Uruguay
239	Latin Am & Carib	RLAME	Venezuela
240	North America	CANAD	Canada
241	North America	USALL	USA



### Annex 3. Production of wood based products, m3 or metric ton (for paper), 2005.

Continent	GTM region	Sawnwood (C)	Sawnwood (NC)	Plywood	Particleboard (except OSB)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	recycled based fluting & testliner	Cartonboard	Sack paper	Other Paper	
Africa	AFRICA EAST	105,200	1,076,600	160,800	17,300		2,000	14,500	12,160	1,200	16,132		-	12,060		-	45,400	8,600		95,347	
Africa	AFRICA NORTH	59,200	90,000	122,800	87,600			33,000	2,000	33,000	114,000		-	98,000		-	-				391,500
Africa	AFRICA SOUTH	2,905,000	299,000	128,118	433,500			102,800	362,000	105,000	497,000		66,000	197,000	678,955	218,405	251,640	96,000	97,000		1,394,000
Africa	AFRICA WEST-CENTRAL	40,000	4,408,564	1,140,600	48,500			230,000					-	-		-	-				4,538
Asia	CHINA	5,270,000	2,054,000	29,081,000	5,843,000		14,700,000	1,067,000	3,269,000	1,070,000	10,530,000	214,000	3,561,000	3,910,000			16,340,000	8,400,000	470,000		12,264,000
Asia	INDIA	1,237,000	4,889,000	2,400,500	23,500		43,500	86,200	622,000	20,000	1,315,000		215,000	40,000			806,000	828,000	100,000		257,100
Asia	INDONESIA	-	6,250,000	5,546,000	125,000		229,000	198,000	557,000		1,619,000		1,078,000	181,000			2,011,000	1,495,000	30,000		176,000
Asia	JAPAN	12,517,000	308,000	3,272,000	1,234,000		420,000	454,000	3,720,000	1,379,000	3,400,000	1,970,000	4,760,000	1,764,000	3,560,088		5,750,912	1,891,000	350,000		2,418,000
Asia	KOREA SOUTH	4,200,000	166,000	1,254,000	847,000		1,653,000	6,000	1,588,000	87,000	557,000		1,795,000	404,000			3,585,000	1,470,000	200,000		568,000
Asia	MALAYSIA	90,000	5,173,000	5,676,000	637,000		1,400,000	1,239,000	253,000		20,000		138,000	130,000			350,000	60,000			3,000
Asia	THAILAND	18,000	270,000	103,000	1,620,000		442,000	282,000	131,000		625,000		295,000	76,000			1,710,000	244,000			350,000
Asia	TURKEY	3,787,000	2,658,000	139,000	2,890,000		1,500,000	242,000	54,000	3,000	201,000		13,000	146,000			856,000	296,000	100,000		-26,000
Asia	MIDDLE EAST	947,575	993,525	502,800	846,820		96,023	39,822	184,000	118,000	183,300		30,300	482,500			403,100	342,200	35,000		431,200
Asia	SOUTH EAST ASIA	76,000	6,294,300	2,500,000	275,700		54,000	5,100	359,400	78,100	312,600			73,900			3,000,000	395,200	100,000		376,400
EU+	BULGARIA	431,000	138,000	77,000	340,000	180,000	-	110,000	-	-	3,000			28,000			78,000	45,000	78,000		94,000
EU+	CZECH REP.	3,730,000	273,000	184,000	1,118,000	100,000	90,000	-	117,000	53,000	112,000		13,000	42,000			257,000	75,000	160,000		140,000
EU+	ESTONIA	1,909,100	153,400	103,000	229,500		-	93,000	-	-	38			-			-	-	-		67,000
EU+	HUNGARY	82,000	133,000	61,000	564,000		-	49,000	-	4,000	238,000			34,000			-	265,000	11,000		1,000
EU+	LATVIA	3,224,700	1,002,000	245,200	180,300		-	-	-	-	1,000			-			-	28,000			9,000
EU+	LITHUANIA	1,025,000	420,000	36,000	274,000		-	88,000	-	-	-			14,000			-	97,000			2,000
EU+	POLAND	2,812,800	547,100	471,300	3,620,600	319,000	1,506,400	819,700	220,700	76,300	595,000			235,900	291,429	97,143	631,429	240,000	135,000		194,000
EU+	ROMANIA	2,584,000	1,737,000	183,000	483,000		290,000	55,000	54,000	-	35,000			56,000	95,205	81,795	-	-	10,000		39,000
EU+	SLOVAKIA	1,984,000	637,000	22,000	570,000		26,000	246,000	-	-	473,000			139,000		165,000	-	41,000	11,000		25,000
EU+	SLOVENIA	387,000	140,000	91,000	130,000		79,000	142,000	116,000	5,000	99,000		140,000	63,000			-	209,000			86,000
EU+	GREECE	73,904	117,176	12,902	820,810		-	8,000	-	-	-			155,000			165,000	70,000			120,000
EU+	ITALY	790,000	800,000	860,000	3,525,000		1,100,000	56,000	191,210	166,908	569,970	1,330,000	1,212,000	1,439,490			2,774,006	652,315	30,000		1,633,465
EU+	PORTUGAL	909,000	101,000	51,000	850,000		330,000	75,000	-	-	1,038,000			77,000	211,083		83,917	49,000	51,000		60,000
EU+	SPAIN	2,750,000	910,000	615,000	3,174,000		1,185,000	81,000	353,000		723,000		687,000	540,000			2,357,000	407,000	158,000		458,000
EU+	DENMARK	175,000	21,000	-	345,000		-	-	-	-	151,000			-			211,000	6,000			15,000
EU+	FINLAND	12,190,000	250,000	1,384,000	452,000		-	149,000	520,140	2,244,000	1,094,000	3,280,000	1,678,000	155,000	302,109	441,891	-	1,832,000	110,000		734,000
EU+	NORWAY	2,300,000	26,000	28,000	366,000		-	189,000	837,000	837,000	41,000		123,000	27,000	226,301	68,699	-	-	10,000		85,000
EU+	SWEDEN	17,440,000	160,000	146,500	487,000		85,000	69,000	2,572,000	785,000	1,197,000	810,000	413,000	317,000	1,822,574	374,426	-	2,455,000	511,000		604,000
EU+	IRELAND	1,014,000	1,000	-	85,000	350,000	389,000	110,000	-	-	-			-			-	45,000			0
EU+	UK	2,716,116	53,386	-	2,237,000	320,000	841,000	-	1,136,000	7,000	792,000	259,000	458,000	801,000			1,692,000	391,000			703,000
EU+	AUSTRIA	10,884,000	190,000	218,420	2,425,000		550,000	310,000	416,000	661,000	443,000	255,000	1,150,000	119,000	358,466		661,534	491,000	210,000		185,000
EU+	BELGIUM	1,075,000	210,000	58,000	2,010,000	355,000	270,000	110,000	265,000	128,000	34,000	451,000	400,000	101,000			-	298,000			48,000
EU+	FRANCE	7,748,000	1,967,000	486,000	4,205,000	395,000	1,110,000	200,000	1,108,000	175,000	1,269,000	972,000	1,094,000	756,000	474,774	155,028	2,800,198	487,000	60,000		864,000
EU+	GERMANY	20,803,000	1,128,000	628,000	9,829,000	1,096,000	3,800,000	1,739,000	2,451,000	1,729,000	1,526,000	2,811,000	2,166,000	1,188,000			5,471,000	2,338,000			1,662,000
EU+	NETHERLANDS	175,942	103,000	-	-		-	11,000	421,000	9,000	505,000		417,000	125,000			867,000	1,057,000			70,000
EU+	SWITZERLAND	1,500,000	91,000	25,000	470,000		357,000	113,000	343,000	5,000	111,000	144,000	374,000	107,000			359,000	163,000			145,000
Europe - Other	BELARUS	2,109,800	557,200	215,000	390,000		-	311,000	-	6,900	-			8,300			-	186,400	18,900		63,300
Europe - Other	BOSNIA&HERZEGOVINA	621,000	698,000	26,000	-		-	2,000	2,000	-	-			32,000			-	35,000	11,750		11,750
Europe - Other	CROATIA	84,000	540,000	23,000	105,000		-	-	19,000	-	-			1,000		85,440	-	92,560			59,000
Europe - Other	EUROPE REST	175,873	147,731	40,448	210,000		250,000	-	-	-	-			-			-	12,762	2,672		11,348
Europe - Other	SERBIA	154,000	343,000	30,000	9,000		-	31,000	54,000	-	-			19,000			-	52,000	20,000	5,000	79,000
Europe - Other	UKRAINE	1,743,000	673,000	239,000	1,150,000		120,000	38,511	5,793	5,793				109,000			-	293,633	293,633		15,854
Europe - Russia	Russia	19,385,000	2,648,000	2,789,000	3,930,000		446,000	850,000	1,984,000	175,000	410,000			165,000	1,102,742	262,558	913,700	290,000	370,000		1,452,000
Latin Am & Carib	ARGENTINA	1,079,000	660,000	89,000	602,000		556,000	100,000	170,000	-	310,000			136,000	74,161		-	343,839	112,000		112,000
Latin Am & Carib	BRAZIL	8,935,000	14,622,000	4,320,000	1,913,000	350,000	1,400,000	566,000	133,000	36,000	1,886,000	250,000	450,000	778,000	1,682,469		1,484,531	708,000	300,000		846,000
Latin Am & Carib	CHILE	7,978,000	320,000	768,000	371,000	130,000	570,784	350,000	362,000	63,000	30,000			121,000			-	324,000	258,000		45,000
Latin Am & Carib	MEXICO	2,222,000	452,000	148,000	100,000		80,000	33,000	256,000		690,000			857,000			-	2,325,000	203,000	100,000	338,000
Latin Am & Carib	LATIN AMERICA REST	1,503,300	4,142,300	690,400	372,500		115,000	204,300	28,000	139,000	382,000			482,900	7,574		-	349,726	277,600	200,000	9,900
North America	CANADA	58,469,632	1,																		

### Annex 4. Net trade (+ for import, - for export) of wood based products, m3 or metric ton (for paper), 2005.

Continent	GTM region	Sawnwood (C)	Sawnwood (NC)	Plywood	Particleboard (except OSB)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	recycled based fluting & testliner	Cartonboard	Sack paper	Other Paper
Africa	AFRICA EAST	151,721	39,605	64,532	22,973	5,718	67,821	26,729	60,433	21,912	102,657	412	28,820	6,946	51,256	9,242	18,831	11,806	8,687	42,924
Africa	AFRICA NORTH	5,201,787	870,598	409,734	133,238	4,269	105,883	100,864	216,233	45,630	198,139	11,042	137,775	(10,026)	141,209	72,377	86,264	139,166	133,736	192,698
Africa	AFRICA SOUTH	(187,116)	263,829	48,253	76,609	2,564	64,936	(6,557)	(38,585)	(34,833)	(47,837)	31,859	110,266	(1,319)	(309,849)	(4,330)	(6)	91,620	37,248	76,695
Africa	AFRICA WEST-CENTRAL	58,074	(1,403,397)	(407,666)	10,427	567	3,468	(62,943)	57,588	50,210	183,115	2,816	58,529	10,258	104,289	51,096	35,151	44,582	28,436	58,130
Asia	CHINA	1,558,007	3,291,822	(4,485,772)	349,463	83,224	244,075	(321,770)	117,920	16,793	46,702	(72,448)	(45,517)	(40,071)	559,129	321,557	507,452	901,109	38,057	833,170
Asia	INDIA	22,764	33,754	(39,919)	64,072	22,292	42,295	97,309	759,071	(12,926)	(22,560)	34,833	57,312	1,472	5,319	927	5,793	5,879	6,252	14,809
Asia	INDONESIA	78,368	(1,597,322)	(3,661,291)	3,049		(139,250)	(77,645)	(253,267)		(1,326,635)	3,125	(566,666)	(51,962)	(1,610)	(25,638)	(16,401)	(127,449)	83,106	(146,610)
Asia	JAPAN	8,092,375	772,880	3,647,764	158,744	195,481	591,391	33,170	162,990	24,325	171,028	158,519	(115,593)	9,165	39,782	(28,548)	(1,014)	238,580	(9,935)	(166,064)
Asia	KOREA SOUTH	436,360	298,259	1,242,576	433,254	318,382	271,033	71,801	(522,244)	(7,703)	160,205	57,774	(1,352,371)	573	84,020	(101,916)	(163,736)	(96,128)	9,980	(184,786)
Asia	MALAYSIA	(74,872)	(4,433,751)	(4,162,410)	(66,488)		(923,969)	(117,552)	104,609	11,245	237,622	10,190	193,143	5,638	104,540	83,405	83,688	178,880	54,146	68,467
Asia	THAILAND	145,689	2,049,330	143,850	(898,395)		(441,685)	(143,407)	141,955	8,653	(218,843)	4,830	36,067	1,500	(63,353)	(94,905)	(130,006)	31,252	26,282	55,702
Asia	TURKEY	284,171	98,393	81,904	24,010	80,859	216,454	189,384	466,138	58,715	165,463	28,272	200,573	(22,382)	219,711	53,544	120,606	199,370	59,255	175,484
Asia	MIDDLE EAST	6,809,827	1,483,698	1,717,747	892,467	181,601	1,357,269	533,691	584,430	183,648	798,052	55,250	556,269	24,730	474,023	88,219	203,331	432,432	150,708	507,009
Asia	SOUTH EAST ASIA	926,300	335,049	1,287,289	290,956	167,533	418,712	39,593	837,198	67,222	545,403	94,498	795,157	6,487	307,088	(1,431)	(22,682)	61,561	94,938	202,918
EU+	BULGARIA	(225,493)	(77,473)	6,532	(118,989)	(131,141)	15,893	(29,425)	38,241	3,613	28,305	3,032	20,481	(4,355)	5,174	993	32,879	(5,122)	(62,578)	9,059
EU+	CZECH REP.	(1,533,633)	153,875	(22,490)	(350,338)	(8,544)	(4,663)	58,819	29,200	52,917	30,446	52,779	97,384	24,676	37,902	12,843	174,833	72,411	(110,984)	(131,415)
EU+	ESTONIA	(465,551)	(57,848)	35,193	(135,242)		12,079	(26,400)	11,167	4,423	14,550	6,259	13,957	1,865	2,357	288	5,598	7,690	(55,683)	24,961
EU+	HUNGARY	980,067	(102,167)	(202)	(115,716)	80,340	49,355	14,024	105,215	62,453	(144,985)	43,618	91,883	27,102	42,446	10,024	(100,017)	29,543	1,252	89,089
EU+	LATVIA	(1,753,439)	(333,473)	(143,095)	(118,198)	37,287	8,482	19,335	1,904	3,440	16,619	6,759	9,144	889	7,981	2,777	11,003	21,864	(6,743)	
EU+	LITHUANIA	(174,377)	(99,197)	13,374	155,206	33,928	13,977	898	17,620	4,916	19,681	8,873	13,714	(541)	7,156	(3,670)	(29,727)	9,809	514	37,490
EU+	POLAND	(165,665)	93,443	(63,185)	164,948	(134,062)	(195,551)	(270,494)	61,170	163,391	(191,222)	147,512	244,648	34,916	(309,982)	(122,432)	585,347	138,701	(65,642)	181,041
EU+	ROMANIA	(1,556,945)	(797,525)	(95,015)	195,613	25,241	(215,239)	30,236	17,860	21,274	51,003	16,975	40,002	886	(8,684)	(30,647)	48,820	31,626	8,807	37,062
EU+	SLOVAKIA	(636,237)	(226,967)	13,297	(90,199)		28,769	36,615	36,638	48,760	(422,966)	29,927	49,300	(13,075)	(35,796)	(103,700)	18,557	30,064	(2,763)	48,077
EU+	SLOVENIA	(345,000)	38,947	(17,998)	(16,225)	2,667	(1,634)	(75,693)	3,411	(59,966)	17,883	(115,888)	11,710	8,442	8,695	56,620	(145,255)	1,813	(946)	
EU+	GREECE	806,524	169,301	98,588	10,028	1,544	182,078	25,567	144,095	31,235	101,905	64,607	121,361	11,802	49,873	42,886	29,033	30,658	12,819	98,188
EU+	ITALY	6,935,519	1,328,257	488,412	227,256	73,961	(91,109)	208,605	644,099	436,508	425,968	(101,891)	(62,776)	(199,732)	785,301	160,194	141,946	160,966	174,111	(274,412)
EU+	PORTUGAL	(396,137)	197,566	62,594	(315,059)		(296,596)	(38,206)	93,087	12,014	(466,665)	72,939	92,677	21,600	(210,984)	21,382	127,340	88,569	(15,622)	97,636
EU+	SPAIN	3,303,334	1,283,500	124,922	428,866	37,501	(241,986)	(69,896)	345,363	291,136	177,636	300,710	(42,208)	51,562	489,627	167,463	(164,022)	214,991	(32,945)	176,425
EU+	DENMARK	1,959,578	125,928	229,473	693,488	49,979	90,021	84,369	231,899	60,464	115,476	79,620	71,947	9,363	83,047	37,563	21,755	85,677	21,864	102,356
EU+	FINLAND	(6,575,265)	(204,893)	(1,151,359)	(218,404)	3,120	55,626	4,978	(457,006)	(1,912,500)	(954,642)	(2,163,995)	(1,566,000)	(44,057)	(17,107)	(335,990)	48,035	(1,494,442)	(90,906)	(1,764,076)
EU+	NORWAY	600,778	80,767	123,852	(122,123)	1,711	52,043	22,556	(808,086)	(687,791)	73,845	(60,201)	51,696	(11,853)	(209,449)	19,901	2,960	17,081	16,907	(45,404)
EU+	SWEDEN	(11,759,685)	(82,183)	94,424	306,916	83,301	41,130	87,143	(1,796,203)	(760,000)	(1,054,426)	(389,014)	(200,000)	(91,251)	(1,660,064)	(267,451)	17,814	(1,808,515)	(503,590)	(877,003)
EU+	IRELAND	1,063,152	221,650	213,122	26,661	(154,833)	(242,593)	(105,379)	135,507	8,364	81,617	9,587	46,516	8,955	43,446	3,110	32,853	31,899	41,475	62,417
EU+	UK	7,677,050	1,029,852	1,506,575	1,090,091	43,064	382,311	392,476	1,221,152	461,092	655,670	442,179	1,154,724	136,914	482,560	(9,699)	145,366	491,156	65,756	486,990
EU+	AUSTRIA	(5,440,831)	(60,148)	(84,296)	(1,721,561)	70,992	(23,368)	(308,570)	(250,801)	(461,674)	(436,555)	(78,805)	(1,003,196)	(3,580)	(279,513)	13,870	(163,419)	21,806	(177,581)	(1,415)
EU+	BELGIUM	846,628	300,988	357,431	(1,189,486)	(98,552)	476,624	6,349	149,384	249,257	41,220	(165,750)	19,317	125,559	5,492	286,634	170,611	31,972	53,905	
EU+	FRANCE	2,435,103	(7,270)	425,157	(729,226)	(250,590)	(685,419)	286,705	(219,848)	512,794	197,675	207,228	235,946	1,720	10,258	(74,934)	140,687	256,491	50,338	(303,304)
EU+	GERMANY	(2,587,049)	(211,494)	936,159	(1,112,033)	(541,894)	(517,394)	(1,414,255)	193,350	230,245	411,245	(523,375)	(841,879)	(11,235)	826,483	53,021	(1,452,138)	(184,793)	135,278	(671,484)
EU+	NETHERLANDS	2,203,854	659,889	544,853	566,821	44,559	181,176	187,804	46,121	184,165	(35,124)	205,844	(53,366)	(13,671)	243,105	(2,123)	(399,703)	243,646	43,593	127,604
EU+	SWITZERLAND	153,247	73,209	157,444	(143,095)	38,828	(229,560)	13,759	(59,867)	44,834	130,985	(47,670)	(249,326)	(6,367)	70,561	4,117	(202,261)	(9,321)	10,422	(19,784)
Europe - Other	BELARUS	(1,151,818)	(63,555)	4,410			3,106	(56,254)	38,527	552	34,148	214	7,335	(5,876)	4,368	2,171	(14,731)	3,058	3,337	
Europe - Other	BOSNIA&HERZEGOVINA	(514,303)	(235,386)	(14,592)	92,836	763	10,894	23,641	10,367	545	9,233	702	8,117	(10,882)	272	(1,895)	(11,498)	4,893	3,869	11,784
Europe - Other	CROATIA	328,754	(425,343)	(833)	54,824	11,098	15,298	35,306	46,202	6,505	32,089	24,588	41,551	2,859	4,495	(57,841)	(53,313)	27,006	11,770	7,435
Europe - Other	EUROPE REST	575,602	(65,629)	62,647	237,574		(22,589)		65,202	9,191	99,440	15,456	64,847	4,183	10,862	9,933	15,215	43,342	3,561	11,006
Europe - Other	SERBIA	329,046	(77,766)	(7,125)	203,277	6,609	31,255	42,752	52,540	4,593	24,645	9,406	4,296	17,131	8,553	3,499	34,104	2,357	20,091	29,914
Europe - Other	UKRAINA	(996,248)	(412,060)	(98,999)	146,313	24,875	78,943	77,877	106,861	15,548	102,396	24,788	78,706	(13,245)	3,332	(1,375)	4,530	70,717	33,363	136,175
Europe - Russia	Russia	(13,940,137)	(768,744)	(1,462,085)	297,779	29,825	79,879	(65,213)	(1,290,716)	(4,069)	(206,027)	61,326	214,482	25,641	(412,179)	(444)	(3,196)	307,835	(200,678)	59,958
Latin Am & Carib	ARGENTINA	(414,542)	77,751	7,																

### Annex 5. Apparent consumption of wood based products, m<sup>3</sup> or metric ton (for paper), 2005.

Continent	GTM region	Sawnwood (C)	Sawnwood (NC)	Plywood	Particleboard (except OSB)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	recycled based fluting & testliner	Cartonboard	Sack paper	Other Paper
Africa	AFRICA EAST	256,921	1,116,205	225,332	40,273	5,718	69,821	41,229	72,593	23,112	118,789	412	28,820	19,006	51,256	9,242	64,231	20,406	8,687	138,271
Africa	AFRICA NORTH	5,260,987	960,598	532,534	220,838	4,269	105,883	133,864	218,233	78,630	312,139	11,042	137,775	87,975	141,209	72,377	86,264	216,166	133,736	584,198
Africa	AFRICA SOUTH	2,717,885	562,829	176,371	510,109	2,564	64,936	96,244	323,416	70,168	449,163	31,859	176,266	195,682	369,106	214,075	251,634	187,620	134,248	1,470,695
Africa	AFRICA WEST-CENTRAL	98,074	3,005,167	732,935	58,927	567	3,468	167,057	57,588	50,210	183,115	2,816	58,529	10,258	104,289	51,096	35,151	44,582	28,436	62,668
Asia	CHINA	6,828,007	5,345,822	24,595,229	6,192,463	83,224	14,944,075	745,230	3,386,920	1,086,793	10,576,702	141,553	3,515,483	3,869,930	559,129	321,557	16,847,452	9,301,109	508,057	13,097,170
Asia	INDIA	1,259,764	4,922,754	2,360,582	87,572	22,292	85,795	183,509	1,381,071	7,074	1,292,441	34,833	272,312	41,472	5,319	927	811,793	833,879	106,252	271,909
Asia	INDONESIA	78,368	4,652,679	1,884,710	128,409	-	89,751	120,355	303,733	-	292,366	3,125	511,335	129,038	0	0	1,994,599	1,367,551	113,266	29,390
Asia	JAPAN	20,609,375	1,080,880	6,919,764	1,392,744	195,481	1,011,391	487,170	3,882,990	1,403,325	3,571,028	2,128,519	4,644,408	1,773,165	3,599,870	0	5,749,898	2,129,580	340,066	2,251,937
Asia	KOREA SOUTH	4,636,360	464,259	2,496,576	1,280,254	318,382	1,924,033	77,801	1,065,756	79,298	717,205	57,774	442,629	404,573	84,020	0	3,421,264	1,373,873	209,980	383,214
Asia	MALAYSIA	15,129	739,250	1,513,591	570,513	-	476,031	1,121,448	357,609	11,245	257,622	10,190	331,143	135,638	104,540	83,405	433,688	238,880	54,146	71,467
Asia	THAILAND	163,689	2,319,330	246,850	721,606	-	315	138,593	272,955	8,653	406,158	4,830	331,067	77,500	-	-	1,579,994	275,252	26,282	405,702
Asia	TURKEY	4,071,171	2,756,393	220,904	20,904	80,859	1,716,454	431,384	520,138	61,715	366,463	28,272	213,573	123,618	219,711	53,544	976,606	495,370	159,255	149,484
Asia	MIDDLE EAST	7,757,402	2,477,223	2,220,547	1,739,287	181,601	1,453,292	573,513	768,430	301,648	981,352	55,250	586,569	507,230	474,023	88,219	606,431	774,632	185,708	938,209
Asia	SOUTH EAST ASIA	1,002,300	6,629,349	3,787,289	566,656	167,533	472,712	44,693	1,196,598	145,322	858,003	94,498	795,157	80,387	307,088	0	2,977,319	456,716	194,938	579,318
EU+	BULGARIA	205,507	60,528	83,532	221,012	48,859	15,893	80,575	3,613	31,305	3,032	20,481	23,646	5,174	993	110,879	39,879	15,423	103,059	-
EU+	CZECH REP.	2,196,367	426,875	161,511	767,663	91,456	85,337	58,819	146,200	105,917	142,446	52,779	110,384	66,676	37,902	12,843	431,833	147,411	49,017	8,586
EU+	ESTONIA	1,443,550	95,553	138,193	94,258	-	12,079	66,600	11,167	4,423	14,588	6,259	13,957	2,888	5,598	2,357	5,988	6,259	11,318	21,961
EU+	HUNGARY	1,062,067	30,834	60,799	448,284	80,340	49,355	63,024	105,215	66,453	93,015	43,618	91,883	61,102	42,446	10,024	164,984	29,543	12,252	90,089
EU+	LATVIA	1,471,262	668,527	102,105	62,103	37,287	8,482	19,335	1,904	3,440	17,619	6,759	9,144	889	7,981	2,777	39,003	21,864	-	2,257
EU+	LITHUANIA	850,624	320,803	49,374	429,206	33,928	13,977	88,898	17,620	4,916	19,681	8,873	13,714	13,460	7,156	0	67,273	9,809	514	39,490
EU+	POLAND	2,647,136	640,543	408,115	3,785,548	184,938	1,310,849	549,207	281,870	239,691	403,778	147,512	244,648	270,816	0	0	1,216,775	378,701	69,359	375,041
EU+	ROMANIA	1,027,056	939,476	87,985	678,613	25,241	74,762	85,236	71,860	21,274	94,013	16,975	40,002	56,886	86,521	51,148	48,820	31,626	18,807	76,062
EU+	SLOVAKIA	1,347,763	410,033	35,297	479,802	-	54,769	282,615	36,638	48,760	50,034	29,927	49,300	125,926	0	61,301	18,557	71,064	8,238	73,077
EU+	SLOVENIA	42,000	178,947	73,002	225,519	2,667	77,367	125,776	40,308	8,411	39,035	17,883	24,112	74,710	8,442	8,695	56,620	63,746	1,813	85,055
EU+	GREECE	880,428	286,477	111,490	830,838	1,544	182,078	33,567	144,095	31,235	101,905	64,607	121,361	166,802	49,873	42,886	194,033	100,658	12,819	218,188
EU+	ITALY	7,725,319	2,128,257	1,348,412	3,752,256	73,961	1,008,892	264,605	835,309	603,416	995,938	1,228,109	1,149,225	1,239,759	785,301	160,194	2,915,952	813,281	204,111	1,359,053
EU+	PORTUGAL	512,863	298,566	113,594	534,942	-	33,404	36,795	93,087	12,014	571,336	72,939	92,678	98,600	100	21,382	211,257	137,569	35,378	157,636
EU+	SPAIN	6,053,334	2,193,500	739,922	3,602,696	37,501	943,014	11,304	698,363	291,136	900,636	300,710	644,793	591,562	489,627	167,463	2,192,979	621,991	125,056	634,425
EU+	DENMARK	2,134,578	146,928	229,473	1,038,488	49,979	90,021	84,369	231,899	60,464	266,476	79,620	71,947	933	83,047	37,563	232,755	91,677	21,864	117,356
EU+	FINLAND	5,614,735	45,108	232,641	233,596	3,120	55,626	153,978	63,135	331,501	139,358	1,116,005	112,000	110,943	285,002	105,901	48,035	337,558	19,094	(1,030,076)
EU+	NORWAY	2,900,778	106,767	151,852	243,878	1,711	52,043	211,556	28,914	149,209	114,845	62,800	51,696	15,148	16,852	88,600	2,960	17,081	26,907	39,597
EU+	SWEDEN	5,680,316	77,817	240,924	793,916	83,301	126,130	156,143	775,797	25,000	142,575	420,987	213,000	225,750	162,510	106,976	17,814	646,485	7,410	(273,003)
EU+	IRELAND	2,077,152	222,650	213,122	111,661	195,167	146,408	4,621	135,507	8,364	81,617	9,587	46,516	8,955	43,446	3,110	77,853	31,899	41,475	62,417
EU+	UK	10,393,166	1,083,238	1,506,575	3,327,091	363,064	1,223,311	392,476	2,357,152	468,092	1,447,670	701,179	1,612,724	937,914	482,560	0	1,837,366	882,156	65,756	1,189,990
EU+	AUSTRIA	5,443,169	129,853	134,124	703,439	70,992	526,633	1,431	165,199	199,327	6,445	176,196	146,804	115,420	78,953	13,870	498,115	512,806	32,420	183,586
EU+	BELGIUM	1,921,628	510,988	415,431	820,515	256,449	746,624	110,000	277,384	283,257	492,220	234,251	120,317	125,559	5,492	584,634	170,611	31,972	101,905	-
EU+	FRANCE	10,183,103	1,959,731	911,157	3,475,774	144,410	424,581	486,705	888,153	687,794	1,466,675	1,179,228	1,329,946	757,720	485,032	80,095	2,940,884	743,491	110,338	360,696
EU+	GERMANY	18,215,952	916,506	1,564,159	8,716,968	554,106	3,282,606	324,745	2,644,350	1,959,245	1,937,245	2,287,626	1,324,121	1,176,766	826,483	53,021	4,018,863	2,153,207	135,278	990,517
EU+	NETHERLANDS	2,379,796	762,889	544,853	566,821	44,559	181,176	198,804	467,121	193,165	469,877	205,844	363,634	138,671	243,105	0	467,298	1,300,646	43,593	197,604
EU+	SWITZERLAND	1,653,247	164,209	182,444	326,906	38,828	127,350	126,759	283,134	49,834	241,985	96,330	124,675	100,634	70,561	4,117	156,739	153,680	10,422	125,216
Europe - Other	BELARUS	957,982	493,645	103,968	394,410	-	3,106	254,746	38,527	7,452	34,148	214	7,335	2,425	4,368	271	171,669	21,958	-	66,637
Europe - Other	BOSNIA&HERZEGOVINA	106,697	462,615	11,409	92,836	763	10,894	25,641	12,367	545	9,233	702	8,117	21,118	272	0	23,503	16,643	3,869	23,534
Europe - Other	CROATIA	412,574	114,658	22,167	159,824	11,098	15,298	35,306	65,202	6,505	32,089	24,588	41,551	3,859	4,495	27,600	39,247	27,006	11,770	66,435
Europe - Other	EUROPE REST	751,475	82,103	103,095	447,574	-	227,411	-	65,202	9,191	99,440	15,456	64,847	4,183	10,862	9,933	27,977	46,014	3,561	22,354
Europe - Other	SERBIA	483,046	265,235	22,875	212,277	6,609	31,255	73,752	106,540	4,593	24,645	9,406	4,296	36,131	8,553	3,499	96,104	22,357	25,091	108,914
Europe - Other	UKRAINE	746,753	260,940	140,002	1,296,313	24,875	78,943	194,777	145,372	21,341	108,189	24,788	78,706	95,755	3,332	0	298,163	364,350	33,363	152,029
Europe - Russia	Russia	5,444,864	1,879,257	1,326,915	4,227,779	29,825	525,879	784,787	693,284	170,931	203,973	61,326	214,482	190,641	690,563	262,114	910,505	597,835	169,323	1,511,958
Latin Am & Carib	ARGENTINA	664,458	737,751	96,096	416,891	7,137	222,619	13,457	238,015	27,052	243,585	38,062	96,111	133,697	192,461	12,313	404,332	204,235	5,894	198,821
Latin Am & Carib	BRAZIL	7,336,542	12,769,798	922,381	1,956,513	151,104	1,432,950	269,985	485,577	77,802	1,164,267	232,884	455,709	741,977	1,191,015	0	1,437,328	578,658	280,886	774,780
Latin Am & Carib	CHILE	3,641,987	242,280	315,128	328,249	110,834	176,999	30,075	110,473	50,583										

Region	Sawnwood (C)	Sawnwood (NC)	Plywood	Particle board (except OSB)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semimical fluting	recycled based fluting & testliner	Carton board	Sack paper	Other Paper
AFRICA EAST	257	1116	225	40	6	70	41	73	23	119	0	29	19	51	9	64	20	9	82
AFRICA NORTH	5261	961	533	221	4	106	134	218	79	312	11	138	88	141	72	86	216	134	226
AFRICA SOUTH	2718	563	176	510	3	65	96	323	70	449	32	176	196	369	214	252	188	134	100
AFRICA WEST-CENTRAL	98	3005	733	59	1	3	167	58	50	183	3	59	10	104	51	35	45	28	256
CHINA	6828	5346	24595	6192	83	14944	745	3387	1087	10577	142	3515	3870	559	322	16847	9301	508	9874
INDIA	1260	4923	2361	88	22	86	184	1381	7	1292	35	272	41	5	1	812	834	106	270
INDONESIA	78	4653	1885	128	0	90	120	304	0	292	3	511	129	0	0	1995	1368	113	185
JAPAN	20609	1081	6920	1393	195	1011	487	3883	1403	3571	2129	4644	1773	3600	0	5750	2130	340	2153
KOREA SOUTH	4636	464	2497	1280	318	1924	78	1066	79	717	58	443	405	84	0	3421	1374	210	642
MALAYSIA	15	739	1514	571	0	476	1121	358	11	258	10	331	136	105	83	434	239	54	95
THAILAND	164	2319	247	722	0	0	139	273	9	406	5	331	77	0	0	1580	275	26	400
TURKEY	4071	2756	221	2914	81	1716	431	520	62	366	28	214	124	220	54	977	495	159	150
MIDDLE EAST	7757	2477	2221	1739	182	1453	574	768	302	981	55	587	507	474	88	606	775	186	720
SOUTH EAST ASIA	1002	6629	3787	567	168	473	45	1197	145	858	94	795	80	307	0	2977	457	195	580
BULGARIA	206	61	84	221	49	16	81	38	4	31	3	20	24	5	1	111	40	15	8
CZECH REP.	2196	427	162	768	91	85	59	146	106	142	53	110	67	38	13	432	147	49	63
ESTONIA	1444	96	138	94	0	12	67	11	4	15	6	14	2	2	0	6	8	11	14
HUNGARY	1062	31	61	448	80	49	63	105	66	93	44	92	61	42	10	165	30	12	76
LATVIA	1471	669	102	62	37	8	19	2	3	18	7	9	1	8	3	39	22	0	14
LITHUANIA	851	321	49	429	34	14	89	18	5	20	9	14	13	7	0	67	10	1	6
POLAND	2647	641	408	3786	185	1311	549	282	240	404	148	245	271	-19	-25	1217	379	69	489
ROMANIA	1027	939	88	679	25	75	85	72	21	94	17	40	57	87	51	49	32	19	73
SLOVAKIA	1348	410	35	480	0	55	283	37	49	50	30	49	126	0	61	19	71	8	34
SLOVENIA	42	179	73	226	3	77	126	40	8	39	18	24	75	8	9	57	64	2	11
GREECE	880	286	111	831	2	182	34	144	31	102	65	121	167	50	43	194	101	13	226
ITALY	7725	2128	1348	3752	74	1009	265	835	565	996	1000	1149	1240	785	160	2916	813	204	1525
PORTUGAL	513	299	114	535	0	33	37	93	12	571	73	93	99	0	21	211	138	35	18
SPAIN	6053	2193	740	3603	38	943	11	698	291	901	301	645	592	490	167	2193	622	125	615
DENMARK	2135	147	229	1038	50	90	84	232	60	266	80	72	1	83	38	233	92	22	17
FINLAND	5615	45	233	234	3	56	154	63	166	139	1116	112	111	285	106	48	338	19	111
NORWAY	2901	107	152	244	2	52	212	29	149	115	63	52	15	17	89	3	17	27	63
SWEDEN	5680	78	241	794	83	126	156	776	25	143	421	213	226	163	107	18	646	7	129
IRELAND	2077	223	213	112	195	146	5	136	8	82	10	47	9	43	3	78	32	41	56
UK	10393	1083	1507	3327	363	1223	392	2357	435	1448	701	1613	938	483	0	1837	882	66	753
AUSTRIA	5443	130	134	703	71	527	1	165	199	6	176	147	115	79	14	498	513	32	100
BELGIUM	1922	511	415	821	256	747	110	271	200	283	270	234	120	126	5	585	171	32	218
FRANCE	10183	1960	911	3476	144	425	487	888	550	1467	1179	1330	758	485	80	2941	743	110	295
GERMANY	18216	917	1564	8717	554	3283	325	2644	1645	1937	1680	1324	1177	826	53	4019	2153	135	1492
NETHERLANDS	2380	763	545	567	45	181	199	467	193	470	206	364	139	243	0	467	1301	44	43
SWITZERLAND	1653	164	182	327	39	127	127	283	50	242	96	125	101	71	4	157	154	10	31
BELARUS	958	494	104	394	0	3	255	39	7	34	0	7	2	4	0	172	22	0	45
BOSNIA&HERZEGOVINA	107	463	11	93	1	11	26	12	1	9	1	8	21	0	0	24	17	4	11
CROATIA	413	115	22	160	11	15	35	65	7	32	25	42	4	4	28	39	27	12	6
SERBIA	483	265	23	212	7	31	74	107	5	25	9	4	36	9	3	86	22	25	20
UKRAINA	747	261	140	1296	25	79	198	145	21	108	25	79	96	3	0	298	364	33	100
European RUSSIA	4628	1597	1128	3594	25	447	667	589	145	173	52	182	162	587	223	774	508	144	538
Siberian RUSSIA	544	188	133	423	3	53	78	69	17	20	6	21	19	69	26	91	60	17	63
Far East RUSSIA	272	94	66	211	1	26	39	35	9	10	3	11	10	35	13	46	30	8	32
ARGENTINA	664	738	96	417	7	223	13	236	27	244	38	96	134	192	12	404	204	6	200
BRAZIL	7337	12770	922	1957	151	1433	270	486	78	1164	233	456	742	1191	0	1437	579	281	500
CHILE	3642	242	315	328	111	177	30	110	51	96	36	95	112	117	30	300	114	35	30
MEXICO	3901	1208	714	210	63	334	163	310	97	834	91	234	859	507	90	2383	438	143	750
LATIN AMERICA REST	2183	3503	878	439	11	177	286	625	217	773	45	215	499	716	142	402	594	273	250
CANADA	3975	2130	2358	1765	1708	626	596	642	876	741	1067	428	694	725	902	551	1001	19	500
USA	125691	25665	20717	8125	23587	4974	5332	9634	5305	11503	4680	5576	6804	15736	5590	7900	8078	670	8000
AUSTRALIA	3849	1335	324	986	0	376	39	805	231	582	253	417	245	168	149	1074	209	38	220
NEW ZEALAND	2453	88	858	160	0	122	11	133	23	92	46	81	57	167	0	212	50	15	50

## Annex 7. Wood prices at the mill gate, US\$2005/m<sup>3</sup>

	Coniferous sawlog	Non- coniferous sawlog	Coniferous pulpwood	Non- coniferous pulpwood
FINLAND	55	80	45.7	45.1
NORWAY	60	80	41.5	44.1
SWEDEN	55	80	45	45
AUSTRIA	65	115	41.5	47.4
BELGIUM	84.7	135.6	39.3	39.3
SWITZERLAND	80.9	90.9	59.1	59.1
GERMANY	75.3	115	44.9	44.9
DENMARK	60	70	45.9	45.9
SPAIN	65.6	113.9	36.8	48.5
FRANCE	63.5	115	45.9	45.9
UK	63.8	63.8	47.7	47.7
GREECE	40	40	40	40
IRELAND	58.3	58.3	58.3	58.3
ITALY	95.1	113.8	49.6	49.6
NETHERLANDS	39.6	39.6	39.6	39.6
PORTUGAL	53.6	113.3	42.5	42.5
BULGARIA	50.9	60.9	30.9	30.9
BOS.&HERZEGOVINA	35.9	35.9	35.9	35.9
BELARUS	27	27	27	27
CZECH REP.	60.2	54.6	40	40
ESTONIA	49.8	49.8	27.5	27.5
CROATIA	47.5	47.5	35.6	35.6
HUNGARY	55.3	65.3	30.3	30.3
LATVIA	55.2	70	40.2	40.2
LITHUANIA	47.5	60.3	39.3	39.3
MID.EAST	29.8	29.8	29.8	29.8
POLAND	45	82.5	34.9	34.9
ROMANIA	50	65	35.5	35.5
SERBIA	45.9	45.9	40	40
SLOVAKIA	54.8	50	32.5	32.5
SLOVENIA	50.5	53.2	40	40
UKRAINE	29.9	32.9	21	21
RUSSIA EUR.	35	33	23	23.7
RUSSIA FAR EAST	32.5	40	17.5	17.5
RUSSIA SIBERIA	27.5	30	22	22
JAPAN	110	473.1	54	80
CHINA	100	150	45	45
INDONESIA	70	70	24.1	31.5
INDIA	120	120	50	50
KOREA	75	150	70.5	70.5
MALAYSIA	75	75	24.7	24.7
THAILAND	52	67.3	64.6	35
TURKEY	50	65	35	35
SOUTH EAST ASIA	52	67.3	64.6	35
CANADA	53	65	30	42.5
USA	65	70	33.5	38.5
ARGENTINA	17	45	15.5	17.4
BRAZIL	35	40	27.5	26.5
CHILE	55	55	28	39
LAT.AMERICA(REST)	40	45	25	25
AFRICA EAST	40	55	24	24
AFRICA NORTH	40	55	25	25

AFRICA SOUTH	40	4.9	31.2	35
AFRICA WEST-CENT	45	45	23	23
MEXICA	45	45	23	23
AUSTRALIA	40.8	65.8	26.3	42.5
NEW ZEALAND	54.1	100.1	28	20.7

**Annex 8. Example for the wood fiber, labor, electricity, fuel inputs and other costs per unit of coated mechanical paper.**

PRODUCT	REGION	TECH	BSKP	BHKP	UKP	SI	PLOGS	ONP	OCC	HIGH	MIXED	LABOR	ELEC	FUEL	OTHER
CWC	ASTRL	AVE	0.19				1.20					6.43	1847.00	4.56	336.00
CWC	AUSTR	AVE	0.24				0.65	0.23				2.56	145.00	12.50	280.10
CWC	BELGI	AVE	0.24				1.05					2.57	1345.00	9.00	275.00
CWC	BRAZL	AVE	0.17				1.25					8.50	760.00	5.73	233.80
CWC	CANAD	AVE	0.28				0.94					2.60	1010.00	10.30	250.00
CWC	CHINA	AVE	0.38				0.36	0.20				19.84	905.00	18.59	421.80

## Annex 9.

Model calculation of wood based products consumption for the base period and actual consumption for 2005, thousand m<sup>3</sup> or metric ton

	Region	Sawnwood (C)	Sawnwood (NC)	Plywood & veneer	Particleboard (other)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	Recycled fluting & testliner	CARTON	Sack	Other Paper
STATISTICS	AFRICA	8,334	5,645	1,667	830	13	244	438	672	222	1,063	46	401	313	666	347	437	469	305	664
	ASIA	46,422	31,388	46,246	15,593	1,049	22,174	3,924	13,136	3,105	19,319	2,559	11,644	7,143	5,354	548	35,399	17,247	1897.787	15,069
	LATIN AMERICA	17,727	18,460	2,926	3,351	343	2,344	762	1,767	469	3,110	442	1,095	2,346	2,724	274	4,927	1,928	737.0725	1,730
	NORTH AMERICA	129,665	27,795	23,075	9,890	25,295	5,600	5,928	10,276	6,180	12,244	5,747	6,003	7,498	16,461	6,492	8,451	9,079	689.152	8,500
	OCEANIA	6,302	1,423	1,182	1,146	0	498	50	938	254	674	299	498	302	335	149	1,286	259	53.7865	270
	EU+	96,063	14,806	9,840	36,272	2,423	10,853	4,018	10,834	5,854	10,073	8,828	8,257	6,502	4,407	1,013	18,558	9,516	1110.6255	6,480
	RUSSIA	5,445	1,879	1,327	4,228	30	526	785	693	171	204	61	214	191	691	262	911	598	169.3225	633
	REST EUROPA	2,707	1,597	300	2,156	43	139	587	368	40	208	60	140	159	21	31	619	452	74.0915	145
	GLOBAL	312,665	102,993	86,563	73,466	29,197	42,378	16,492	38,684	16,295	46,896	18,041	28,254	24,453	30,659	9,116	70,587	39,549	5036.9435	33,491
MODEL	AFRICA	8,290	5,874	1,677	848	13	241	441	680	228	1,103	47	416	319	673	338	434	486	312	670
	ASIA	45,717	32,290	46,773	15,535	1,007	22,013	3,921	13,336	3,184	19,965	2,584	12,156	7,267	5,382	525	35,185	17,909	1,932	15,157
	LATIN AMERICA	17,854	19,128	2,950	3,416	337	2,328	765	1,794	480	3,222	446	1,139	2,372	2,738	264	4,897	2,006	753	1,743
	NORTH AMERICA	129,505	28,838	23,118	10,041	24,672	5,576	5,949	10,447	6,324	12,641	5,800	6,224	7,585	16,665	6,348	8,450	9,469	704	8,601
	OCEANIA	6,278	1,464	1,196	1,145	0	503	50	950	261	696	302	518	308	336	145	1,279	270	54	271
	EU+	96,290	15,232	9,877	36,937	2,372	10,867	4,045	11,061	5,286	10,203	7,945	8,611	6,589	4,489	1,022	18,780	9,929	1,144	6,586
	RUSSIA	5,497	1,957	1,342	4,311	27	525	793	708	177	212	62	222	194	699	257	908	623	174	641
	REST EUROPA	2,708	1,660	303	2,167	42	137	591	375	41	215	60	146	161	20	31	623	470	76	184
	GLOBAL	312,139	106,442	87,237	74,399	28,469	42,190	16,555	39,350	15,981	48,255	17,244	29,431	24,795	31,001	8,929	70,556	41,162	5,148	33,854



**Annex 10.****Model calculation of wood based products production for the base period and actual consumption for 2005, thousand m<sup>3</sup> or metric tons**

	Region	Sawnwood (C)	Sawnwood (NC)	Plywood & veneer	Particleboard (other)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	Recycled fluting & testliner	CARTON	Sack	Other Paper
<b>STATISTICS</b>	AFRICA	3,109	5,874	1,552	587	0	2	380	376	139	627	0	66	307	679	218	297	182	97	1,885
	ASIA	28,143	29,056	50,474	14,342	0	20,538	3,619	10,737	2,755	18,763	2,184	11,885	7,207	3,560	0	34,812	15,421	1,385	16,818
	LATIN AMERICA	21,717	20,196	6,015	3,359	480	2,722	1,253	949	238	3,298	250	450	2,375	1,764	0	4,827	1,559	645	1,318
	NORTH AMERICA	127,656	29,550	18,051	9,903	24,785	5,030	4,601	12,662	5,917	12,253	5,100	5,050	7,462	19,133	6,681	8,512	10,521	870	9,296
	OCEANIA	7,694	1,341	1,237	1,182	0	1,622	88	821	74	480	80	70	256	552	172	1,441	243	51	713
	EU+	100,714	11,309	5,986	38,790	3,115	12,008	4,823	11,121	6,885	11,050	10,435	10,202	6,519	3,782	1,384	19,141	11,008	1,612	7,773
	RUSSIA	19,385	2,648	2,789	3,930	0	446	850	1,984	175	410	0	0	165	1,103	263	914	290	370	1,452
	REST EUROPA	4,888	2,964	573	1,874	0	250	464	114	13	6	0	0	169	0	85	672	347	5	240
	GLOBAL	313,306	102,939	86,679	73,966	28,380	42,617	16,079	38,764	16,197	46,887	18,049	27,723	24,461	30,573	8,804	70,616	39,571	5,035	39,495
<b>MODEL</b>	AFRICA	3,109	7,660	1,550	962	0	0	366	430	140	700	0	96	401	715	230	101	185	100	1,900
	ASIA	26,023	28,487	50,892	15,269	0	19,471	3,029	11,198	2,532	18,664	2,029	13,202	7,425	3,900	0	34,884	16,535	1,305	13,150
	LATIN AMERICA	22,209	21,850	5,995	3,502	480	2,721	1,327	1,092	238	3,411	250	738	2,270	1,762	0	4,491	1,755	710	1,230
	NORTH AMERICA	128,500	29,529	18,200	9,466	24,800	5,030	4,800	12,800	5,930	12,400	5,100	5,000	7,600	19,050	6,700	8,640	10,580	800	8,830
	OCEANIA	7,033	1,283	1,260	1,188	0	2,360	88	895	120	483	80	0	325	510	170	1,450	245	70	160
	EU+	101,655	10,638	6,027	38,428	3,205	12,163	5,049	10,795	6,605	12,054	9,789	10,395	6,418	3,970	1,395	19,254	10,929	1,766	7,514
	RUSSIA	19,760	4,146	2,780	3,940	0	446	1,435	2,060	370	500	0	0	200	1,100	450	900	500	400	965
	REST EUROPA	3,849	2,850	533	1,645	0	0	462	80	48	42	0	0	158	0	0	836	432	0	105
	GLOBAL	312,139	106,442	87,237	74,399	28,485	42,191	16,556	39,350	15,983	48,255	17,248	29,431	24,797	31,007	8,945	70,556	41,161	5,151	33,854

## Annex 11.

Model calculation of wood based products net trade for the base period and actual consumption for 2005, thousand m<sup>3</sup> or metric tons

STATISTICS	Region	Sawnwood (C)	Sawnwood (NC)	Plywood & veneer	Particleboard (other)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	Recycled fluting & testliner	CARTON	Sack	Other Paper
	AFRICA		(5,224)	229	(115)	(243)	(13)	(242)	(58)	(296)	(83)	(436)	(46)	(335)	(6)	13	(128)	(140)	(287)	(208)
ASIA		(18,279)	(2,332)	4,228	(1,251)	(1,049)	(1,636)	(305)	(2,399)	(350)	(556)	(375)	242	65	(1,794)	(548)	(587)	(1,825)	(513)	1,749
LATIN AMERICA		3,990	1,736	3,089	7	137	378	491	(818)	(231)	188	(192)	(645)	29	(959)	(274)	(100)	(370)	(92)	(412)
NORTH AMERIC		(2,009)	1,755	(5,023)	12	(510)	(570)	(1,326)	2,386	(263)	9	(647)	(953)	(36)	2,672	189	61	1,442	181	796
OCEANIA		1,392	(82)	55	36	-	1,124	38	(117)	(180)	(194)	(219)	(428)	(46)	217	23	154	(16)	(3)	443
EU+		4,651	(3,497)	(3,854)	2,518	692	1,156	805	287	1,031	977	1,607	1,945	18	(625)	371	583	1,492	501	1,293
RUSSIA		13,940	769	1,462	(298)	(30)	(80)	65	1,291	4	206	(61)	(214)	(26)	412	0	3	(308)	201	819
REST EUROPA		2,180	1,367	273	(282)	(43)	111	(123)	(254)	(28)	(203)	(60)	(140)	10	(21)	54	54	(105)	(69)	95
MODEL	Region	Sawnwood (C)	Sawnwood (NC)	veneer	(other)	OSB	MDF	Other	Newsprint	Mechanical	Woodfree	mechanical	woodfree	Household	Kraft liner	fluting	fluting &	CARTON	Sack	Other Paper
	AFRICA	(5,181)	1,786	(127)	115	(13)	(241)	(75)	(250)	(88)	(403)	(47)	(320)	82	43	(108)	(333)	(301)	(212)	1,230
ASIA	(19,694)	(3,802)	4,119	(266)	(1,007)	(2,542)	(892)	(2,138)	(652)	(1,300)	(555)	1,047	157	(1,482)	(525)	(301)	(1,374)	(627)	(2,007)	
LATIN AMERICA	4,356	2,722	3,045	86	143	393	562	(702)	(242)	189	(196)	(401)	(102)	(976)	(264)	(405)	(251)	(44)	(513)	
NORTH AMERIC	(1,005)	691	(4,918)	(575)	128	(546)	(1,149)	2,353	(394)	(241)	(700)	(1,224)	16	2,385	353	190	1,111	96	229	
OCEANIA	755	(182)	64	43	-	1,857	38	(55)	(141)	(213)	(222)	(518)	17	174	25	171	(25)	16	(111)	
EU+	5,365	(4,594)	(3,850)	1,491	833	1,296	1,004	(267)	1,319	1,852	1,844	1,784	(170)	(519)	373	474	1,000	623	927	
RUSSIA	14,264	2,189	1,438	(371)	(27)	(79)	642	1,352	193	289	(62)	(222)	6	401	193	(8)	(123)	226	324	
REST EUROPA	1,141	1,190	230	(522)	(42)	(137)	(129)	(295)	7	(173)	(60)	(146)	(3)	(20)	(31)	213	(38)	(76)	(79)	

## Annex 12.

Model calculation of wood based products consumption in EU for the base period and actual consumption for 2005, thousand m<sup>3</sup> or metric ton

Region	Sawnwood (C)	Sawnwood (NC)	Plywood & veneer	Particleboard (other)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	Recycled fluting & testliner	CARTON	Sack	Other Paper	Region	Paper	Sawnwood	Wood based panels
Austria	5,443	130	134	703	71	527	1	165	199	6	176	147	115	79	14	498	513	32	100	Austria	2,046	5,573	1,437
Belgium	1,922	511	415	821	256	747	110	271	200	283	270	234	120	126	5	585	171	32	218	Belgium	2,515	2,433	2,349
Bulgaria	206	61	84	221	49	16	81	38	4	31	3	20	24	5	1	111	40	15	8	Bulgaria	301	266	450
Czech Rep	2,196	427	162	768	91	85	59	146	106	142	53	110	67	38	13	432	147	49	63	Czech Rep	1,366	2,623	1,165
Denmark	2,135	147	229	1,038	50	90	84	232	60	266	80	72	1	83	38	233	92	22	17	Denmark	1,195	2,282	1,492
Estonia	1,444	96	136	94	-	12	67	11	4	15	6	14	2	2	0	6	8	11	14	Estonia	94	1,539	311
Finland	5,615	45	233	234	3	56	154	63	166	139	1,116	112	111	285	106	48	338	19	111	Finland	2,614	5,660	679
France	10,183	1,960	911	3,476	144	425	487	888	688	1,467	1,179	1,330	758	485	80	2,941	743	110	295	France	10,964	12,143	5,443
Germany	18,216	917	1,564	8,717	554	3,283	325	2,644	1,959	1,937	2,288	1,324	1,177	826	53	4,019	2,153	135	1,492	Germany	20,008	19,132	14,443
Greece	880	286	111	831	2	182	34	144	31	102	65	121	167	50	43	194	101	13	226	Greece	1,256	1,167	1,160
Hungary	1,062	31	61	448	80	49	63	105	66	93	44	92	61	42	10	165	30	12	76	Hungary	797	1,093	702
Ireland	2,077	223	213	112	195	146	5	136	8	82	10	47	9	43	3	78	32	41	56	Ireland	544	2,300	671
Italy	7,725	2,128	1,348	3,752	74	1,009	265	835	603	996	1,228	1,149	1,240	785	160	2,916	813	204	1,525	Italy	12,456	9,854	6,448
Latvia	1,471	669	102	62	37	8	19	2	3	18	7	9	1	8	3	39	22	-	14	Latvia	125	2,140	229
Lithuania	851	321	49	429	34	14	89	18	5	20	9	14	13	7	-	67	10	1	6	Lithuania	169	1,171	615
Netherlands	2,380	763	545	567	45	181	199	467	193	470	206	364	139	243	-	467	1,301	44	43	Netherlands	3,936	3,143	1,536
Norway	2,901	107	152	244	2	52	212	29	149	115	63	52	15	17	89	3	17	27	63	Norway	638	3,008	661
Poland	2,647	641	408	3,786	185	1,311	549	282	240	404	148	245	271	(19)	(25)	1,217	379	69	489	Poland	3,698	3,288	6,239
Portugal	513	299	114	535	-	33	37	93	12	571	73	93	99	0	21	211	138	35	18	Portugal	1,364	811	719
Romania	1,027	939	88	679	25	75	85	72	21	94	17	40	57	87	51	49	32	19	73	Romania	611	1,967	952
Slovakia	1,348	410	35	480	-	55	283	37	49	50	30	49	126	-	61	19	71	8	34	Slovakia	534	1,758	852
Slovenia	42	179	73	226	3	77	126	40	8	39	18	24	75	8	9	57	64	2	11	Slovenia	355	221	504
Spain	6,053	2,193	740	3,603	38	943	11	698	291	901	301	645	592	490	167	2,193	622	125	615	Spain	7,639	8,247	5,334
Sweden	5,680	78	241	794	83	126	156	776	25	143	421	213	226	163	107	18	646	7	129	Sweden	2,873	5,758	1,400
Switzerland	1,653	164	182	327	39	127	127	283	50	242	96	125	101	71	4	157	154	10	31	Switzerland	1,323	1,817	802
UK	10,393	1,083	1,507	3,327	363	1,223	392	2,357	468	1,448	701	1,613	938	463	-	1,837	882	66	763	UK	11,546	11,476	6,813
Total	96,063	14,906	9,840	36,272	2,423	10,853	4,018	10,834	5,611	10,073	8,605	8,257	6,502	4,407	1,013	18,558	9,516	1,111	6,480	Total	90,988	110,868	63,406
Region	Sawnwood (C)	Sawnwood (NC)	Plywood & veneer	Particleboard (other)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	Recycled fluting & testliner	CARTON	Sack	Other Paper	Region	Paper	Sawnwood	Wood based panels
Austria	5,474	134	135	720	69	529	0	169	207	6	180	153	117	80	14	506	535	33	102	Austria	2,102	5,608	1,454
Belgium	1,914	525	417	841	252	743	110	276	208	285	276	244	121	128	5	592	178	33	221	Belgium	2,567	2,438	2,363
Bulgaria	208	63	85	227	48	16	82	39	4	31	3	21	24	5	0	113	42	16	8	Bulgaria	306	271	457
Czech Rep	2,214	442	163	787	90	85	59	149	110	144	54	114	68	39	13	435	153	51	64	Czech Rep	1,382	2,656	1,184
Denmark	2,126	151	230	1,053	49	90	84	237	62	268	82	75	0	84	37	236	96	23	17	Denmark	1,217	2,277	1,506
Estonia	1,456	99	139	96	0	12	68	11	4	15	6	15	2	2	0	6	8	11	14	Estonia	95	1,555	315
Finland	5,661	46	234	239	3	56	155	65	172	141	1,141	117	113	290	105	49	353	20	113	Finland	2,677	5,707	687
France	10,241	2,015	915	3,562	142	427	489	908	571	1,477	1,202	1,387	769	492	79	2,965	773	113	300	France	11,035	12,255	5,534
Germany	18,364	941	1,570	8,933	545	3,296	329	2,704	1,717	1,975	1,725	1,386	1,194	841	53	4,086	2,251	140	1,523	Germany	19,593	19,306	14,673
Greece	876	294	111	841	0	181	34	146	32	103	66	126	169	51	42	196	105	13	229	Greece	1,279	1,170	1,168
Hungary	1,057	32	61	459	78	49	63	107	68	94	45	96	62	43	10	168	31	12	77	Hungary	813	1,090	710
Ireland	2,063	229	214	113	192	147	5	139	8	83	10	49	9	44	3	79	33	42	57	Ireland	555	2,292	671
Italy	7,672	2,185	1,353	3,798	72	1,013	266	851	587	1,008	1,022	1,198	1,258	792	157	2,947	848	210	1,550	Italy	12,427	9,857	6,502
Latvia	1,483	691	103	64	36	8	19	2	3	18	7	9	0	8	3	40	23	0	14	Latvia	127	2,174	229
Lithuania	858	332	49	434	33	14	90	18	5	20	9	15	13	7	0	68	10	0	6	Lithuania	172	1,190	620
Netherlands	2,370	783	547	574	44	180	200	478	201	477	210	380	141	247	0	474	1,356	45	44	Netherlands	4,053	3,153	1,545
Norway	2,917	110	152	249	0	52	213	30	155	116	64	54	15	17	88	3	18	28	64	Norway	652	3,027	667
Poland	2,669	659	411	3,833	182	1,316	555	288	249	409	151	255	275	0	0	1,224	395	71	496	Poland	3,812	3,328	6,296
Portugal	516	309	114	548	0	33	37	95	12	578	74	97	100	0	21	213	144	36	18	Portugal	1,388	825	733
Romania	1,038	971	89	687	24	75	85	73	22	95	17	42	58	88	50	49	33	20	74	Romania	622	2,009	961
Slovakia	1,359	424	35	492	0	55	284	38	51	51	31	51	128	0	60	19	74	8	35	Slovakia	545	1,783	866
Slovenia	42	184	73	229	3	77	127	41	8	40	18	25	76	8	9	57	67	2	11	Slovenia	363	226	510
Spain	6,012	2,251	744	3,647	37	947	11	714	302	914	307	674	599	496	164	2,227	649	130	624	Spain	7,799	8,263	5,386
Sweden	5,726	81	242	806	81	126	157	796	26	145	431	222	229	166	106	18	676	7	131	Sweden	2,954	5,807	1,411
Switzerland	1,656	168	183	335	38	128	128	290	52	246	98	130	102	72	4	159	161	10	32	Switzerland	1,355	1,824	812
UK	10,322	1,112	1,509	3,368	354	1,216	393	2,399	450	1,465	714	1,677	948	489	0	1,853	918	68	763	UK	11,744	11,434	6,839
Total	96,290	15,232	9,877	36,937	2,372	10,867	4,045	11,061	5,286	10,203	7,945	8,611	6,589	4,488	1,022	18,780	9,929	1,144	6,586	Total	91,644	111,522	64,098

## Annex 13.

Model calculation of wood based products production in EU for the base period and actual consumption for 2005, thousand m<sup>3</sup> or metric ton

Region	Sawnwood (C)	Sawnwood (NC)	Plywood & veneer	Particleboard (other)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	Recycled fluting & testliner	CARTON	Sack	Other Paper	Region	Paper	Sawnwood	Wood based panels
Austria	10,884	190	218	2,425	-	550	310	416	661	443	255	1,150	119	358	-	662	491	210	185	Austria	4,950	11,074	3,503
Belgium	1,075	210	58	2,010	355	270	110	265	128	34	451	400	101	-	-	298	-	-	48	Belgium	1,725	1,285	2,803
Bulgaria	431	138	77	340	180	-	110	-	-	3	-	-	28	-	-	78	45	78	94	Bulgaria	326	569	707
Czech Rep	3,730	273	184	1,118	100	90	-	117	53	112	-	13	42	-	-	257	75	160	140	Czech Rep	969	4,003	1,492
Denmark	175	21	-	345	-	-	-	-	-	151	-	-	-	-	-	211	6	-	15	Denmark	383	196	345
Estonia	1,909	153	103	230	-	-	93	-	-	0	-	-	-	-	-	-	-	67	(3)	Estonia	64	2,063	426
Finland	12,190	250	1,384	452	-	-	149	520	2,244	1,094	3,280	1,678	155	302	442	-	1,832	110	734	Finland	12,391	12,440	1,985
France	7,748	1,967	486	4,205	395	1,110	200	1,108	175	1,269	972	1,094	756	475	155	2,800	487	60	664	France	10,015	9,715	6,396
Germany	20,803	1,128	628	9,829	1,096	3,800	1,739	2,451	1,729	1,526	2,811	2,166	1,188	-	-	5,471	2,338	-	1,662	Germany	21,342	21,931	17,092
Greece	74	117	13	821	-	-	8	-	-	-	-	-	155	-	-	165	70	-	120	Greece	510	191	842
Hungary	82	133	61	564	-	-	49	-	4	238	-	-	34	-	-	265	-	11	1	Hungary	553	215	674
Ireland	1,014	1	-	85	350	389	110	-	-	-	-	-	-	-	-	45	-	-	-	Ireland	45	1,015	934
Italy	790	800	860	3,525	-	1,100	56	191	167	570	1,330	1,212	1,439	-	-	2,774	652	30	1,633	Italy	9,999	1,590	5,541
Latvia	3,225	1,022	245	180	-	-	-	-	-	1	-	-	-	-	-	28	-	-	9	Latvia	38	4,227	426
Lithuania	1,025	420	36	274	-	-	88	-	-	-	-	-	14	-	-	97	-	-	2	Lithuania	1,113	1,445	398
Netherlands	176	103	-	-	-	-	11	421	9	505	-	417	125	-	-	867	1,057	-	70	Netherlands	3,471	279	11
Norway	2,300	26	28	366	-	-	189	837	837	41	123	-	27	226	69	-	-	10	85	Norway	2,255	2,326	583
Poland	2,813	547	471	3,621	319	1,506	820	221	76	595	-	-	236	291	97	631	240	135	194	Poland	2,717	3,360	6,737
Portugal	909	101	51	850	-	330	75	-	-	1,038	-	-	77	211	-	84	49	51	60	Portugal	1,570	1,010	1,306
Romania	2,584	1,737	183	483	-	290	55	54	-	35	-	-	56	95	82	-	-	10	39	Romania	371	4,321	1,011
Slovakia	1,984	637	22	570	-	26	246	-	-	473	-	-	139	-	165	-	41	11	25	Slovakia	854	2,621	864
Slovenia	387	140	91	130	-	79	142	116	5	99	-	140	63	-	-	209	-	-	86	Slovenia	718	527	442
Spain	2,750	910	615	3,174	-	1,185	81	353	-	723	-	687	540	-	-	2,357	407	158	458	Spain	5,683	3,660	5,055
Sweden	17,440	160	147	487	-	85	69	2,572	785	1,197	810	413	317	1,823	374	-	2,455	511	604	Sweden	11,861	17,600	788
Switzerland	1,500	91	25	470	-	357	113	343	5	111	144	374	107	-	-	359	163	-	145	Switzerland	1,751	1,591	965
UK	2,716	53	-	2,237	320	841	-	1,136	7	792	259	458	801	-	-	1,692	391	-	703	UK	6,239	2,770	3,398
Total	100,714	11,309	5,986	38,790	3,115	12,008	4,823	11,121	6,885	11,050	10,435	10,202	6,519	3,782	1,384	19,141	11,008	1,612	7,773	Total	100,913	112,023	64,723
Region	Sawnwood (C)	Sawnwood (NC)	Plywood & veneer	Particleboard (other)	OSB	MDF	Fibreboard, Other	Newsprint	Uncoated Mechanical	Uncoated Woodfree	Coated mechanical	Coated woodfree	Household	Kraft liner	Semichemical fluting	Recycled fluting & testliner	CARTON	Sack	Other Paper	Region	Paper	Sawnwood	Wood based panels
Austria	10,884	153	220	2,425	0	550	310	400	695	493	255	1,036	117	360	0	720	486	209	165	Austria	4,935	11,037	3,505
Belgium	1,065	300	60	2,010	355	270	110	270	165	0	455	400	55	0	0	300	0	0	50	Belgium	1,695	1,365	2,805
Bulgaria	431	138	80	340	180	0	110	0	0	0	0	0	28	0	0	90	75	100	15	Bulgaria	308	569	710
Czech Rep	3,730	377	184	1,115	100	90	0	120	0	110	0	13	42	0	0	260	60	165	100	Czech Rep	870	4,107	1,489
Denmark	175	0	0	345	0	0	0	0	0	150	0	0	0	0	0	225	0	0	35	Denmark	410	175	345
Estonia	1,755	153	103	230	0	0	100	0	0	0	0	0	0	0	0	0	0	62	0	Estonia	62	1,908	433
Finland	12,200	33	1,400	600	0	0	200	520	2,000	1,200	3,300	1,750	155	305	450	0	1,850	135	750	Finland	12,415	12,233	2,200
France	8,333	1,918	500	4,205	400	1,110	260	1,120	220	1,210	951	1,235	830	475	160	2,821	440	9	383	France	9,854	10,251	6,475
Germany	21,767	800	650	9,030	1,150	3,805	1,740	2,151	1,530	1,975	2,172	2,060	1,330	0	0	5,400	2,270	0	2,060	Germany	20,948	22,567	16,375
Greece	74	117	0	821	0	0	0	0	55	0	0	0	0	0	0	176	0	0	125	Greece	356	191	821
Hungary	82	133	61	565	0	0	50	0	0	250	0	0	25	0	0	265	0	40	45	Hungary	625	215	676
Ireland	907	0	0	85	350	420	110	0	0	0	0	0	0	0	0	45	0	0	0	Ireland	45	907	965
Italy	790	550	850	3,600	0	1,105	60	200	200	635	1,245	1,215	1,500	0	0	2,796	922	12	1,580	Italy	10,305	1,340	5,615
Latvia	2,625	921	245	180	0	0	0	0	0	0	0	0	0	0	0	29	0	0	0	Latvia	29	3,546	425
Lithuania	1,025	420	36	274	0	0	90	0	0	0	0	0	0	0	0	100	4	0	0	Lithuania	104	1,445	400
Netherlands	176	103	0	0	0	0	11	357	50	560	0	388	145	0	0	875	975	0	240	Netherlands	3,590	279	11
Norway	2,657	0	30	410	0	0	190	850	800	0	130	0	0	280	85	0	0	0	85	Norway	2,230	2,657	630
Poland	2,825	550	471	3,615	350	1,506	820	212	100	630	0	0	350	300	100	650	250	160	190	Poland	2,942	3,375	6,763
Portugal	900	200	50	850	0	445	75	0	0	1,145	0	0	0	327	0	92	0	68	50	Portugal	1,682	1,100	1,420
Romania	2,564	1,737	183	463	0	290	55	55	4	35	0	0	60	100	85	0	10	10	50	Romania	409	4,301	1,011
Slovakia	1,984	637	22	570	0	26	246	0	0	490	0	0	140	0	165	0	50	30	45	Slovakia	920	2,621	864
Slovenia	387	140	91	130	0	79	142	115	15	120	0	190	80	0	0	90	0	0	0	Slovenia	610	527	442
Spain	2,750	899	615	3,185	0	1,185	150	337	0	800	0	810	230	0	0	2,357	445	190	400	Spain	5,569	3,649	5,135
Sweden	17,440	260	150	500	0	85	70	2,600	771	1,270	846	470	335	1,823	350	0	2,455	576	300	Sweden	11,796	17,700	805
Switzerland	1,414	100	25	520	0	357	150	345	0	151	155	357	67	0	0	344	148	0	145	Switzerland	1,712	1,514	1,052
UK	2,716	0	0	2,340	320	840	0	1,144	0	830	280	470	930	0	0	1,710	400	0	700	UK	6,464	2,716	3,500
Total	101,655	10,638	6,027	38,428	3,205	12,163	5,049	10,795	6,605	12,054	9,789	10,395	6,418	3,970	1,395	19,254	10,929	1,766	7,514	Total	100,884	112,293	64,872

**Annex 14. Historical industrial roundwood harvest and model calculated harvest for the base period**

countries	Industrial roundwood harvest, cum under bark (FAOSTAT)						Industrial roundwood harvest without other industrial roundwood, Thousand cum		Model logs harvest, 2005	Difference from 5 years average	Difference from 2005		
	2003	2004	2005	2006	2007	2008	Industrial roundwood 5 years average (2003-2007)	Other industrial roundwood (5 years average)					
Austria	13,719,000	12,943,000	12,786,000	14,430,000	16,520,964	16,771,739	14,079,793	0	14,080	12,786	14,846	-5%	-16%
Belgium	4,215,000	4,250,000	4,300,000	4,405,000	4,275,000	4,000,000	4,289,000	181,000	4,108	4,119	4,164	-1%	-1%
Bulgaria	2,645,890	3,076,670	3,183,670	3,107,000	3,170,000	3,379,000	3,036,646	90,202	2,946	3,093	3,114	-6%	-1%
Czech Rep	13,960,000	14,411,000	14,285,000	16,333,000	16,738,000	14,307,000	15,145,400	272,400	14,873	14,013	14,215	4%	-1%
Denmark	810,390	568,000	1,681,600	1,196,000	1,460,000	1,680,000	1,143,198	65,360	1,078	1,616	1,100	-2%	32%
Estonia	8,400,000	5,500,000	4,450,000	4,300,000	3,510,000	3,780,000	5,232,000	489,800	4,742	3,960	5,288	-12%	-34%
Finland	49,246,000	49,280,858	47,115,985	45,521,308	51,405,725	45,965,249	48,513,975	0	48,514	47,116	49,728	-3%	-6%
France	30,540,000	31,289,000	28,253,000	28,591,795	29,816,654	27,650,787	29,698,090	413,911	29,284	27,839	30,036	-3%	-8%
Germany	45,415,000	48,657,000	50,905,000	54,000,000	68,029,000	46,806,000	53,401,200	3,585,400	49,816	47,320	50,907	-2%	-8%
Greece	599,248	468,678	518,527	461,960	948,076	948,076	599,298	105,579	494	413	634	-28%	-54%
Hungary	3,004,000	2,988,300	2,804,000	2,667,000	2,761,000	2,715,000	2,844,860	958,400	1,886	1,846	2,033	-8%	-10%
Ireland	2,653,200	2,542,489	2,629,000	2,655,000	2,678,000	1,972,000	2,631,538	114,909	2,517	2,514	2,598	-3%	-3%
Italy	2,639,000	2,883,316	3,017,392	3,012,753	2,991,113	2,649,585	2,908,715	818,362	2,090	2,199	1,916	8%	13%
Latvia	11,925,000	11,784,000	11,892,600	11,865,600	11,144,900	8,207,330	11,722,420	755,460	10,967	11,137	12,508	-14%	-12%
Lithuania	4,955,000	4,860,000	4,915,000	4,640,000	4,890,000	4,525,000	4,852,000	64,000	4,788	4,851	5,351	-12%	-10%
Netherlands	754,000	735,724	820,000	816,676	732,046	828,386	771,689	51,145	721	769	971	-35%	-26%
Norway	6,989,161	7,353,000	8,489,959	7,282,477	8,211,911	8,070,781	7,665,302	27,103	7,638	8,463	8,422	-10%	0%
Poland	27,204,000	29,337,000	28,531,300	28,766,800	32,460,959	30,469,587	29,260,012	2,122,090	27,138	26,409	27,061	0%	-2%
Portugal	9,073,000	10,269,000	10,146,238	10,204,638	10,222,886	10,265,781	9,983,152	179,857	9,803	9,966	10,606	-8%	-6%
Romania	12,537,000	12,794,000	11,542,000	9,454,000	11,572,000	9,517,300	11,579,800	1,760,800	9,819	9,781	11,495	-17%	-18%
Slovakia	6,051,000	6,936,000	9,005,000	7,561,435	7,714,864	8,714,041	7,453,660	415,070	7,039	8,590	8,259	-17%	4%
Slovenia	2,232,000	1,826,000	1,789,481	2,195,566	2,093,373	2,061,770	2,027,284	143,818	1,883	1,646	2,057	-9%	-25%
Spain	14,075,000	14,235,000	13,351,000	14,109,000	12,546,000	14,324,809	13,663,200	762,800	12,900	12,588	14,034	-9%	-11%
Sweden	61,200,000	61,400,000	92,300,000	58,700,000	72,300,000	63,100,000	69,180,000	500,000	68,680	91,800	65,169	5%	29%
Switzerland	4,013,000	3,984,000	4,033,821	4,284,502	4,298,035	3,815,622	4,122,672	14,046	4,109	4,020	4,073	1%	-1%
United Kingdom	7,817,000	8,062,000	8,165,000	8,113,000	8,562,000	7,853,000	8,143,800	417,000	7,727	7,748	7,722	0%	0%
EU+	346,671,889	352,434,035	380,910,573	348,674,510	391,052,506	344,377,843	363,948,703	14,308,513	349,640	366,602	358,306	-2%	2%
Russian Federation	126,600,000	130,600,000	138,000,000	144,600,000	162,000,000	136,700,000	140,360,000	16,688,000	123,672	121,312	135,542	-10%	-12%
Other_Euro area	19,636,786	21,401,750	21,268,724	22,491,777	22,816,753	23,519,749	21,523,158	3,644,283	17,879	17,624	25,409	-42%	-44%
Europe +	492,908,675	504,435,785	540,179,297	515,766,287	575,869,259	504,597,592	525,831,861	34,640,796	491,191	505,539	519,257	-6%	-3%
Africa +	71,896,674	72,031,074	67,681,074	69,023,874	70,119,924	70,292,804	70,150,524	27,227,340	42,923	40,454	42,665	1%	-5%
Asia +	227,779,726	239,400,378	241,760,906	239,599,944	236,748,155	243,363,944	237,057,822	55,326,608	181,731	186,434	200,491	-10%	-8%
Northern America	582,412,000	623,404,000	623,703,000	597,330,000	569,976,000	489,249,000	599,365,000	12,914,400	586,451	610,789	613,245	-5%	0%
Latin America	178,435,700	172,152,500	186,808,500	189,490,500	198,843,900	196,805,500	185,146,220	11,361,380	173,785	175,447	162,007	7%	8%
Oceania +	50,535,600	49,974,100	49,597,000	50,615,900	52,000,900	52,377,900	50,544,700	8,223,000	42,322	41,374	51,226	-21%	-24%
World +	1,603,968,375	1,661,397,837	1,709,729,777	1,661,826,505	1,703,558,138	1,556,686,740	1,668,096,126	149,693,524	1,518,403	1,560,036	1,588,891	-5%	-2%