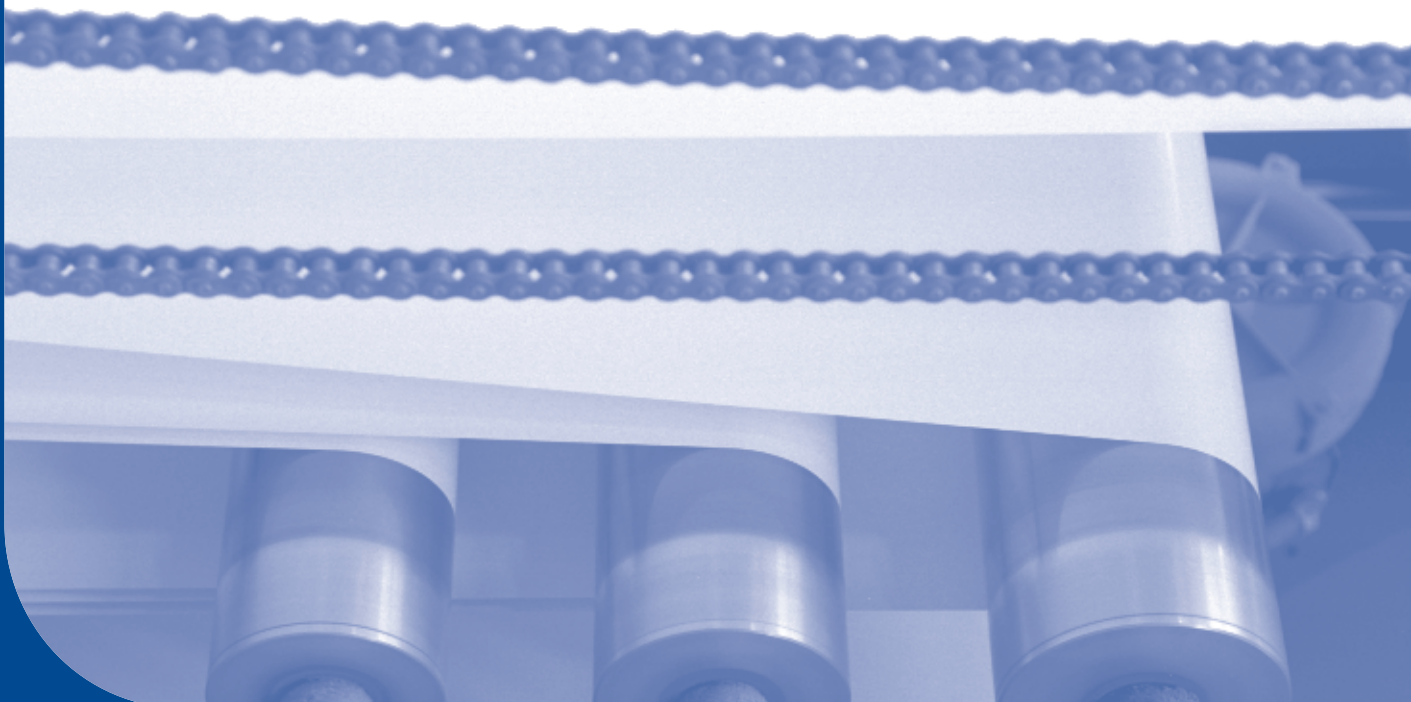


WOODFREE

FORECAST REPORT - INCLUDING FORECASTS OF DEMAND, SUPPLY AND PRICES



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EMGE & Co. Ltd.
PO Box 200
Truro
Cornwall
TR1 1FN
United Kingdom

Tel: +44 (0)1872 581000 | Fax: +44 (0)1872 562969
Email: post@emge.com | URL: www.emge.com

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Regional Classifications

The EMGE European Woodfree Report is structured to include both Western Europe and Eastern/Other Europe region (excluding Russia), together with European-wide totals.

Specifically, there are 3 main geographical groupings in this report (W.Europe-16, E.Europe-14 and Europe-30), which are composed as follows:

W. Europe-16 :

Germany, France, UK, Italy, Finland, Norway, Sweden, Belgium, Luxembourg, Netherlands, Spain, Portugal, Austria, Switzerland, Denmark, Ireland.

E. Europe-14 :

Poland, Greece, Czech Republic, Hungary, Romania, Slovakia, Estonia, Latvia, Lithuania, Slovenia, Bulgaria, Cyprus, Malta, Iceland

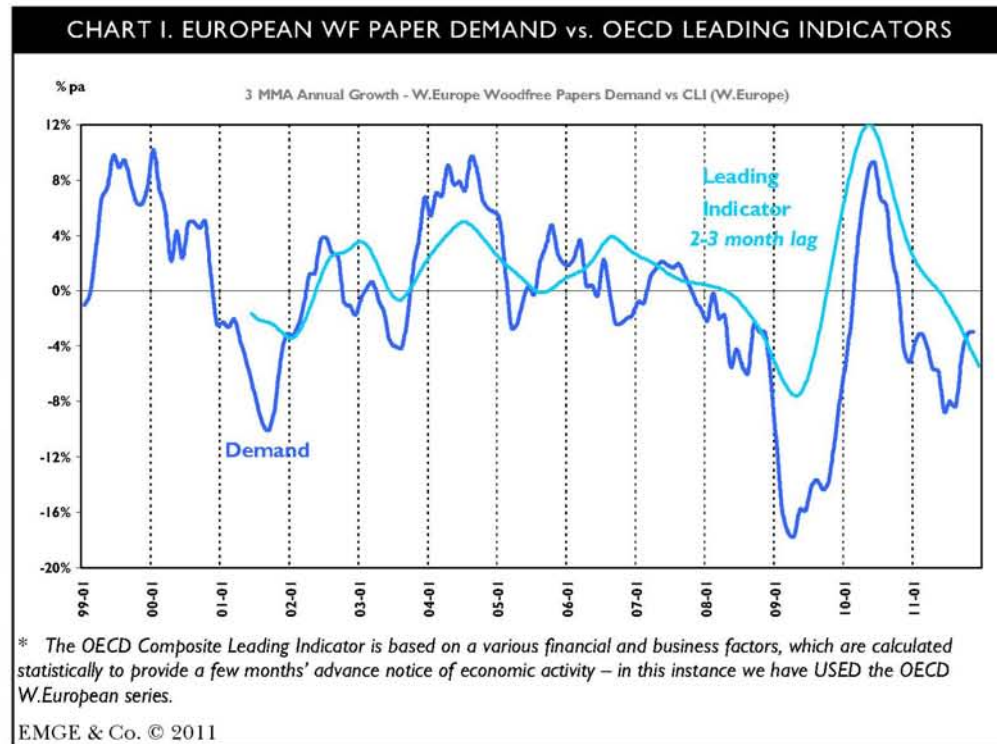
Europe-30 :

All of the above. Quarterly Market forecast tables have been organised into their own section (see, page 105 onwards).

In addition to the above regions, we have again included a brief section on Russia (see page 7), at the request of a number of clients.

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Introduction



This forecast report ("EUROPEAN WOODFREE DECEMBER 2011") is an update in the **EMGE** series *EUROPEAN WOODFREE*.

In this report, we present forecasts for the European Woodfree paper market from 2010 to 2015.

Based on all the data available (to October 2011) and combining the latest developments in the markets, we present an updated outlook for demand, trade, investment, capacity, operating rates and prices for the European Woodfree paper markets. The sub-grades covered include Coated Woodfree Sheets and Reels, as well as Uncoated Woodfree Cut-Size, Folio Sheets and Reels. The report does not cover speciality grades or I-side Coateds.

Also, in this issue, we introduce an upcoming new media development (see page 21) that has the potential to compete with print for advertising spend – **Social Networking Media** (e.g. **Facebook**).

Forecast Summary: Data

Table 1: Forecasted Model Summary (continued)							
Forecast 10							
Forecast	2010	2011	2012	2013	2014	2015	2016-17
Forecast 10	100	110	120	130	140	150	160
Forecast 10	110	120	130	140	150	160	170
Forecast 10	120	130	140	150	160	170	180
Forecast 10	130	140	150	160	170	180	190
Forecast 10	140	150	160	170	180	190	200
Forecast 10	150	160	170	180	190	200	210
Forecast 10	160	170	180	190	200	210	220
Forecast 11							
Forecast	2010	2011	2012	2013	2014	2015	2016-17
Forecast 11	100	110	120	130	140	150	160
Forecast 11	110	120	130	140	150	160	170
Forecast 11	120	130	140	150	160	170	180
Forecast 11	130	140	150	160	170	180	190
Forecast 11	140	150	160	170	180	190	200
Forecast 11	150	160	170	180	190	200	210
Forecast 11	160	170	180	190	200	210	220
Forecast 12							
Forecast	2010	2011	2012	2013	2014	2015	2016-17
Forecast 12	100	110	120	130	140	150	160
Forecast 12	110	120	130	140	150	160	170
Forecast 12	120	130	140	150	160	170	180
Forecast 12	130	140	150	160	170	180	190
Forecast 12	140	150	160	170	180	190	200
Forecast 12	150	160	170	180	190	200	210
Forecast 12	160	170	180	190	200	210	220

Table 2: Forecasted Summary by Model							
Forecasted Model Summary							
Forecast Model	Forecasted Summary			Forecasted Summary			
Forecast Model	2010	2011	2012	2013	2014	2015	2016-17
Forecast Model	100	110	120	130	140	150	160
Forecast Model	110	120	130	140	150	160	170
Forecast Model	120	130	140	150	160	170	180

Keywords: Summary, Copyright, ISI

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

2017-2018 (2017-2018)							
Year	2017	2018	2019	2020	2021	2022	2023-24
2017-2018	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2018-2019	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2019-2020	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2020-2021	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2021-2022	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2022-2023	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2023-2024	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2024-2025	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2025-2026	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2026-2027	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2027-2028	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2028-2029	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2029-2030	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2030-2031	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2031-2032	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2032-2033	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2033-2034	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2034-2035	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2035-2036	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2036-2037	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2037-2038	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2038-2039	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2039-2040	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2040-2041	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2041-2042	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2042-2043	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2043-2044	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2044-2045	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2045-2046	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2046-2047	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2047-2048	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2048-2049	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2049-2050	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2050-2051	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2051-2052	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2052-2053	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2053-2054	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2054-2055	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2055-2056	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2056-2057	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2057-2058	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2058-2059	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2059-2060	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Financial Summary: W Europe-10

TABLE 1. WOODROSE FARM MARKET SUMMARY, W EUROPE-10							
SEPTEMBER 2011 FORECAST, W Europe-10							
W Europe	2010	2011	2012	2013	2014	2015	2016-17
Offroad	1.7%	1.7%	2.0%	1.7%	1.9%	2.0%	1.7%
W Europe							
WILSON WOODROSE (Units)	2011	2012	2013	2014	2015	2016	2016-17
Units	202	210	200	210	210	210	-1.5%
Units/yr	4.0%	4.0%	1.0%	4.0%	1.0%	1.0%	
Value	100	100	110	100	100	100	0.5%
Value	2000	2100	2110	2000	2000	1970	-1.2%
Value/yr	10.0%	5.0%	0.5%	-5.0%	0.0%	-1.5%	
Units	2000	2000	2000	2000	1900	1700	-1.5%
Units/yr	-1.0%	-1.0%	-1.0%	-1.0%	-2.0%	-1.0%	
Q. Rev.	11%	10%	10%	10%	10%	10%	
Prod./Unit	0.100	0.100	0.100	0.100	0.100		
Prod./Unit	0.075	0.100	0.110	0.080	0.080		
WILSON WOODROSE							
Units	2000	2000	2000	2000	2000	2000	-1.5%
Units/yr	4.0%	4.0%	1.0%	4.0%	1.0%	1.0%	
Q. Rev.	10.0%	11.0%	11.0%	10.0%	11.0%	11.0%	-1.5%
Value	100	100	100	100	100	100	0.5%
Value/yr	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	-1.5%
Units	2000	2000	2000	2000	2000	2000	-1.5%
Units/yr	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Q. Rev.	0%	0%	0%	0%	0%	0%	
Prod./Unit	0.100	0.100	0.100	0.100	0.100		
Prod./Unit	0.080	0.100	0.100	0.075	0.075		
WILSON WOODROSE (Prod. & Sales - Global)	2011	2012	2013	2014	2015		
Q. Rev.	10%	10%	10%	10%	10%	10%	

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Financial Summary: Russia

TABLE 2. WOODPULP PAPER MARKET SUMMARY: RUSSIA							
SEPTEMBER 2011 FORECAST, Russia							
Item/Value	2010	2011	2012	2013	2014	2015	2016-18
GDP/Growth	1.0%	0.2%	1.0%	1.0%	0.1%	1.0%	1.0%
Pulp Supply							
2010 Pulp Production (Ktons)	2817	2812	2812	2812	2812	2812	2812-12
Imports	274	287	320	330	340	340	1.0%
Exports	17.7%	0.0%	11.0%	10.0%	1.0%	0.0%	
2010 PAPER PRODUCTION							
2010 Pulp	100	100	100	100	100	100	1.0%
2010-11	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	
2011	100	100	100	100	100	100	1.0%
2012	100	100	100	100	100	100	1.0%
2013	100	100	100	100	100	100	1.0%
2014	100	100	100	100	100	100	1.0%
2015	100	100	100	100	100	100	1.0%
2016	100	100	100	100	100	100	1.0%
2017	100	100	100	100	100	100	1.0%
2018	100	100	100	100	100	100	1.0%
2019	100	100	100	100	100	100	1.0%
2020	100	100	100	100	100	100	1.0%
2021	100	100	100	100	100	100	1.0%
2022	100	100	100	100	100	100	1.0%
2023	100	100	100	100	100	100	1.0%
2024	100	100	100	100	100	100	1.0%
2025	100	100	100	100	100	100	1.0%
2026	100	100	100	100	100	100	1.0%
2027	100	100	100	100	100	100	1.0%
2028	100	100	100	100	100	100	1.0%
2029	100	100	100	100	100	100	1.0%
2030	100	100	100	100	100	100	1.0%
2031	100	100	100	100	100	100	1.0%
2032	100	100	100	100	100	100	1.0%
2033	100	100	100	100	100	100	1.0%
2034	100	100	100	100	100	100	1.0%
2035	100	100	100	100	100	100	1.0%
2036	100	100	100	100	100	100	1.0%
2037	100	100	100	100	100	100	1.0%
2038	100	100	100	100	100	100	1.0%
2039	100	100	100	100	100	100	1.0%
2040	100	100	100	100	100	100	1.0%
2041	100	100	100	100	100	100	1.0%
2042	100	100	100	100	100	100	1.0%
2043	100	100	100	100	100	100	1.0%
2044	100	100	100	100	100	100	1.0%
2045	100	100	100	100	100	100	1.0%
2046	100	100	100	100	100	100	1.0%
2047	100	100	100	100	100	100	1.0%
2048	100	100	100	100	100	100	1.0%
2049	100	100	100	100	100	100	1.0%
2050	100	100	100	100	100	100	1.0%
2051	100	100	100	100	100	100	1.0%
2052	100	100	100	100	100	100	1.0%
2053	100	100	100	100	100	100	1.0%
2054	100	100	100	100	100	100	1.0%
2055	100	100	100	100	100	100	1.0%
2056	100	100	100	100	100	100	1.0%
2057	100	100	100	100	100	100	1.0%
2058	100	100	100	100	100	100	1.0%
2059	100	100	100	100	100	100	1.0%
2060	100	100	100	100	100	100	1.0%
2061	100	100	100	100	100	100	1.0%
2062	100	100	100	100	100	100	1.0%
2063	100	100	100	100	100	100	1.0%
2064	100	100	100	100	100	100	1.0%
2065	100	100	100	100	100	100	1.0%
2066	100	100	100	100	100	100	1.0%
2067	100	100	100	100	100	100	1.0%
2068	100	100	100	100	100	100	1.0%
2069	100	100	100	100	100	100	1.0%
2070	100	100	100	100	100	100	1.0%
2071	100	100	100	100	100	100	1.0%
2072	100	100	100	100	100	100	1.0%
2073	100	100	100	100	100	100	1.0%
2074	100	100	100	100	100	100	1.0%
2075	100	100	100	100	100	100	1.0%
2076	100	100	100	100	100	100	1.0%
2077	100	100	100	100	100	100	1.0%
2078	100	100	100	100	100	100	1.0%
2079	100	100	100	100	100	100	1.0%
2080	100	100	100	100	100	100	1.0%
2081	100	100	100	100	100	100	1.0%
2082	100	100	100	100	100	100	1.0%
2083	100	100	100	100	100	100	1.0%
2084	100	100	100	100	100	100	1.0%
2085	100	100	100	100	100	100	1.0%
2086	100	100	100	100	100	100	1.0%
2087	100	100	100	100	100	100	1.0%
2088	100	100	100	100	100	100	1.0%
2089	100	100	100	100	100	100	1.0%
2090	100	100	100	100	100	100	1.0%
2091	100	100	100	100	100	100	1.0%
2092	100	100	100	100	100	100	1.0%
2093	100	100	100	100	100	100	1.0%
2094	100	100	100	100	100	100	1.0%
2095	100	100	100	100	100	100	1.0%
2096	100	100	100	100	100	100	1.0%
2097	100	100	100	100	100	100	1.0%
2098	100	100	100	100	100	100	1.0%
2099	100	100	100	100	100	100	1.0%
2100	100	100	100	100	100	100	1.0%

Our overview of the Russian market is shown separately as it is not included in the forecasts for EEurope14 or EEurope20 in this report.

Deliveries, Capacity and Operating Rates

TABLE 1: DEMAND SUPPLY OUTLOOK						
Europe 3B						
YTD volume	2010	2011	2012	2013	2014	2015
Lumber woodwork						
Volume	1500	1520	1510	1510	1510	1510
Capacity	1500	1520	1520	1520	1520	1520
Op. Rate	100%	99%	99%	99%	99%	99%
Manufactured woodwork						
Volume	1500	1520	1520	1520	1520	1520
Capacity	1500	1520	1520	1520	1520	1520
Op. Rate	100%	99%	99%	99%	99%	99%
Total woodwork						
Volume	3000	3040	3030	3030	3030	3030
Capacity	3000	3040	3040	3040	3040	3040
Op. Rate	100%	99%	99%	99%	99%	99%
UK Europe 1A						
YTD volume	2010	2011	2012	2013	2014	2015
Lumber woodwork						
Volume	1500	1520	1510	1510	1510	1510
Capacity	1500	1520	1520	1520	1520	1520
Op. Rate	100%	99%	99%	99%	99%	99%
Manufactured woodwork						
Volume	1500	1520	1520	1520	1520	1520
Capacity	1500	1520	1520	1520	1520	1520
Op. Rate	100%	99%	99%	99%	99%	99%
Total woodwork						
Volume	3000	3040	3030	3030	3030	3030
Capacity	3000	3040	3040	3040	3040	3040
Op. Rate	100%	99%	99%	99%	99%	99%
E Europe 1A (PMT only)						
YTD volume	2010	2011	2012	2013	2014	2015
Volume	1200	1200	1200	1200	1200	1200
Capacity	1200	1200	1240	1200	1200	1200
Op. Rate	100%	100%	97%	100%	100%	100%

Source: EAGE, July 2011 (all values)

Forecast / GDP

Table 8. ENGE – ECONOMIC FORECAST						
European GDP – real growth %pt						
	Germany	France	UK	Italy	Spain	European-26
2009	2.7%	1.4%	1.8%	1.2%	1.8%	1.9%
2010	2.8%	1.2%	0.8%	0.5%	1.1%	1.2%
2011	1.2%	0.4%	0.4%	-0.2%	0.7%	0.4%
2012	1.7%	1.2%	1.8%	0.4%	0.9%	1.2%
2013	2.1%	1.8%	1.2%	1.1%	1.4%	1.8%
2014	2.8%	2.4%	2.8%	1.7%	2.2%	2.4%
Long-term average growth %pt						
2005-10 %pt	1.2%	0.7%	0.8%	-0.4%	1.4%	0.8%
2000-10 %pt	2.1%	1.4%	1.7%	0.8%	1.2%	1.4%
	Sweden	Netherlands	Denmark	Belgium	EU-14	European-26
2009	2.8%	1.8%	0.1%	1.8%	0.2%	1.9%
2010	0.1%	1.0%	-0.2%	1.4%	0.7%	1.2%
2011	1.8%	0.8%	-0.7%	0.8%	1.4%	0.8%
2012	0.1%	0.7%	-0.1%	0.4%	0.1%	1.2%
2013	0.7%	1.8%	1.8%	1.1%	2.8%	1.8%
2014	2.7%	2.7%	1.7%	1.4%	3.2%	2.4%
Long-term average growth %pt						
2005-10 %pt	1.8%	1.2%	0.8%	1.1%	2.2%	0.8%
2000-10 %pt	2.4%	1.4%	0.8%	1.1%	0.1%	1.4%

[ENGE, 2010, 2011, 2012, 2013]

Forecast Summary: Commentary



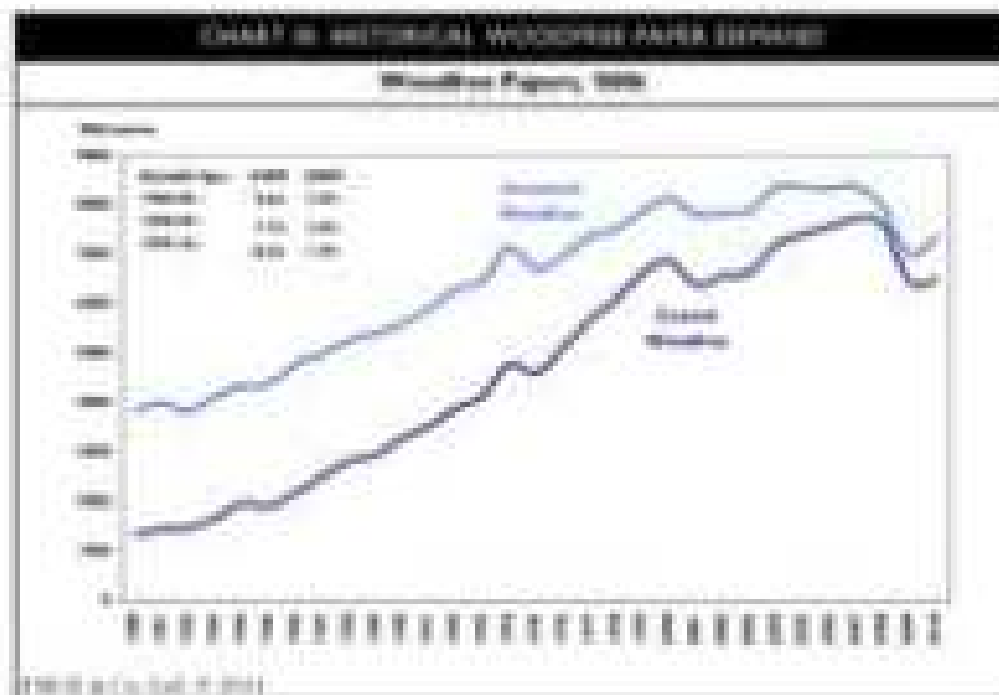
- Following negative demand in 2011, the very short-term outlook for Woodfree paper demand remains negative/negative, with European economic activity weighed down mainly by worries about the financial stability of several highly indebted European countries, and by extension, the Eurozone itself, as well as stubborn unemployment levels and falling Woodfree Paper prices, which encourage reductions in inventory.

- In 2011, W Europe-16 demand is estimated to fall by -8.8% for Coated Woodfree and by -8.4% for Uncoated Woodfree.

- In E Europe-17 in 2011, we expect demand to fall by -8.8% for Coated Woodfree and -5.1% for Uncoated Woodfree. This is a downgrade on our forecast, as apparent demand has been affected by a slowing economy outlook in Eastern Europe.

- All of this adds up to our demand estimates for the Europe-25 region in 2011, which are -8.4% for Coated Woodfree and -5.8% for Uncoated Woodfree.

- We expect the current downturn to bottom in the next month or two, as worries about the Eurozone crisis eases. We predict that the decline in demand will ease, with demand actually returning to growth in mid 2011, boosted by the London Olympics and the Euro 2012 football championship in Ukraine and Poland. The balance for 2012 as a whole is forecast to be flat in W Europe-16, but positive in E Europe-17 and Europe-25.



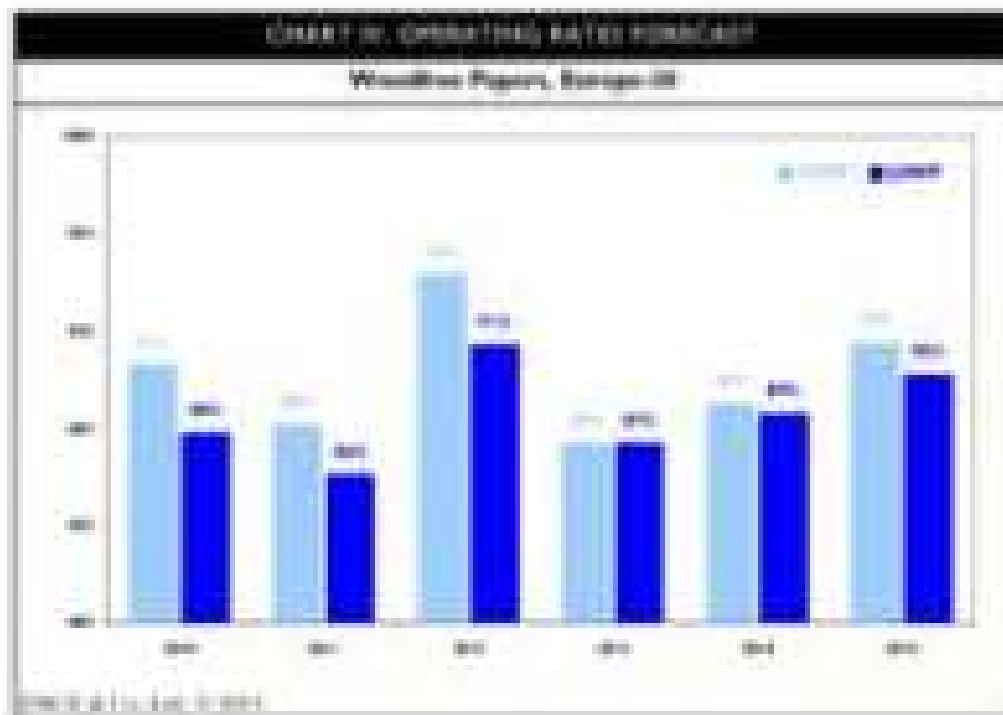
Global economic demand is expected to weaken after the US Presidential election in late-2012 and especially in 2013, largely because we believe the new US President will have no option but to make dramatic changes in policy and deep spending cuts to prevent the country's finances spiralling out of control.

This is expected to be a difficult process altogether and the outcome will have a negative impact on global economic growth. European and Asian economies and paper markets will also be affected. Consequently, our paper demand forecasts for 2013 are significantly negative.

During 2014, we predict a more stable situation, with the market cycle beginning to improve and demand returning to growth once again (but in 2014, but not strongly enough to make 2014 a positive year). However, unless serious steps toward sustained strategic debt cuts are taken a full-blown financial crisis (see "Disrupted – Current" section, page 35), the system is forecast to be extended and continue in 2015, which we expect to be a year of growth.

In the long term, amid a range of demand dampening factors (see *End Use/Downward Drivers*, from page 34), the long-term trend for Woodframe paper demand in Europe is expected to be negative. As such, long-term demand is forecast to be negative in Yr Europe-14 (-1.0% pa average for 2015-2015 in *Conservative Woodframe* and -1.0% pa average in *Unconservative Woodframe*). However, from a much lower base, we expect a slightly positive trend in Yr Europe-14 (+0.4% pa average in *Conservative Woodframe* and +0.4% pa average in *Unconservative Woodframe*).

Added together, this gives us a negative long-term forecast for the Europe-20 region (-1.2% pa average in *Conservative Woodframe* and -1.0% pa average in *Unconservative Woodframe*).

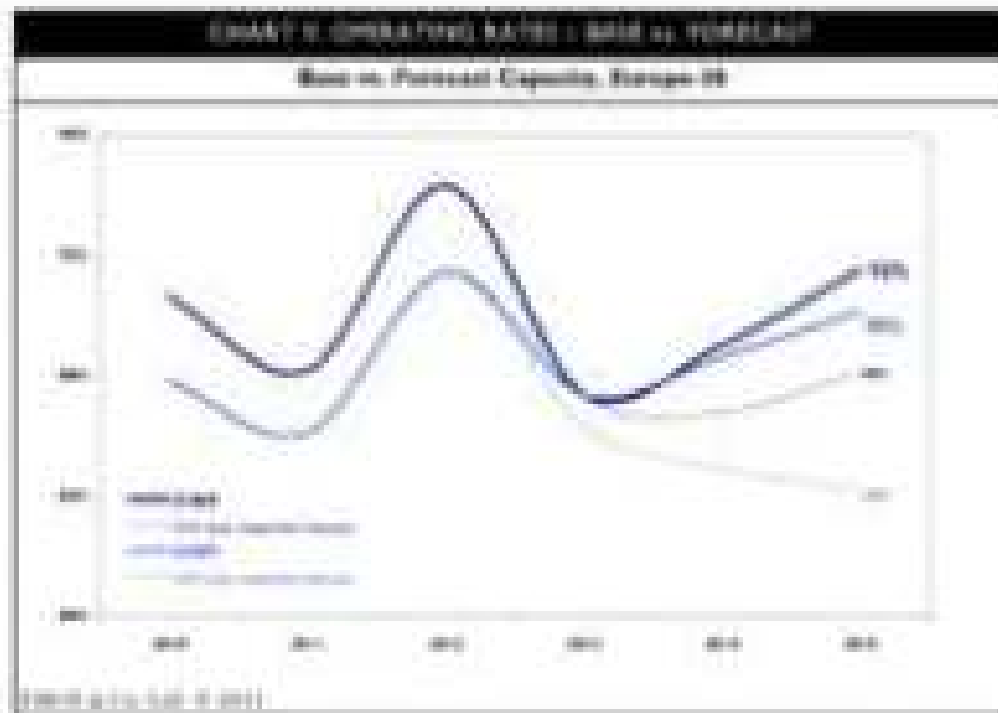


- Due to global and European overcapacity, the following three consecutive quarters is experiencing capacity, generally following periods of particularly heavy overcapacity.

- Following a recovery since 2011, the industry already announced are forecast to help Operating Rates rise above 90% in 2013 (see chart above). We expect this to help paper suppliers balance the market in 2013.

- The forecast paper-machine closures (which have not yet been decided), are predicted to take place mostly in 2014 and 2015. These will be in response to the poor forecast year of 2013, which is predicted to see Operating Rates fall to 87%, due to poor economic demand conditions.

- The subsequent (as yet undecided) closures are then forecast to help boost Operating Rates back up to 89% in 2014 and 90% and above in 2015.



- The industry has proven itself capable of closing capacity when necessary, which is one of the reasons why we have forecast more capacity additions than have so far been announced. However, we warn that **if the industry does not make more closures than it is currently planning, then we must expect Operating Rates to line with our Best Capacity**. This would be especially difficult in the **Unseasoned Woodfree** sector, where **Operating Rates could slide below 80%, no profit (80% is the CRR level)**.

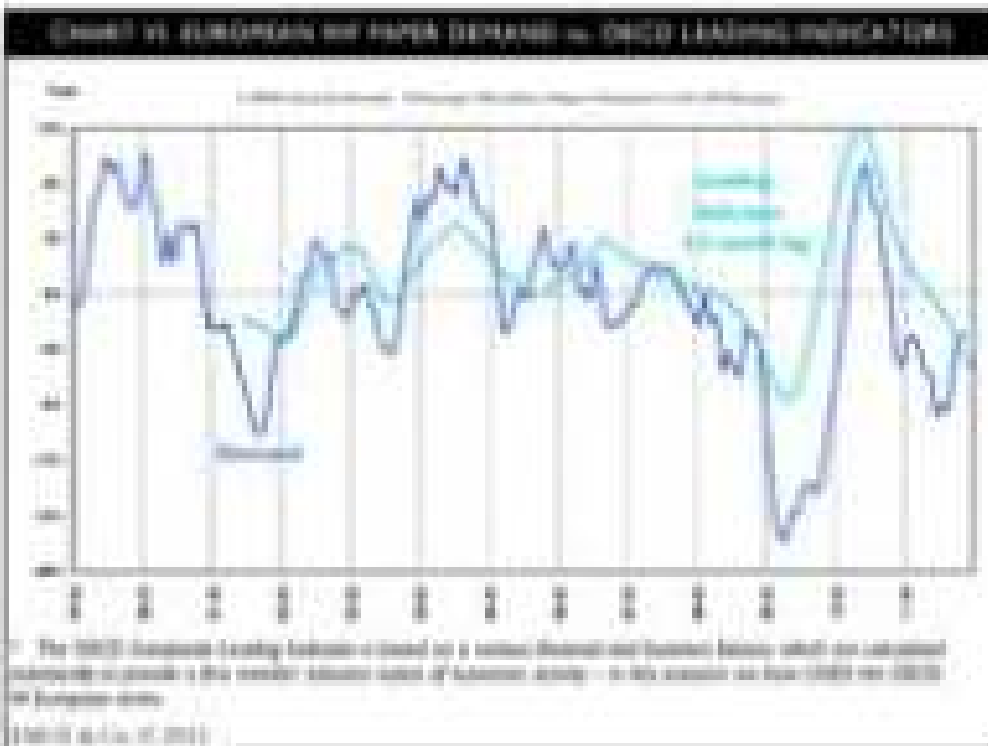
- Despite a weak Euro, we expect European Coated Woodfree net exports to fall during the forecast period, due to weak global demand and competition from Asian capacity. Unseasoned Woodfree net exports are expected to rise in 2011 and 2012 but to be followed by declines in 2013 due to poor demand and 2014/2015 due to European capacity cutbacks.

- Prices, meanwhile, are falling as forecast, but we expect this to end during the first quarter of 2012, partly due to seasonally stronger demand and capacity reductions boosting Operating Rates and partly due to Chinese buyers re-entering the pulp market and starting a new global price upswing. This should then be followed by a moderate price recovery during the improving demand period and spring season in 2012, followed by renewed declines in the poor 2013 that we are forecasting.

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1. Demand

1.1. Demand: Short-term Outlook



As in our last report, our forecast cycle involves a drop in demand in 2011, with the decline going shallower towards year-end 2011 and then returning to growth around the middle of 2012. In the past couple of months, the decline has indeed begun to get shallower, but we are concerned that this is not yet the start of the improvement we have been expecting, because the indicators remain weak (see above chart).

The shallower fall in demand in the past couple of months have in fact only been seen in Coated Woodfree, while Uncoated Woodfree demand has deepened further in decline (-5% for the 3 months to November 2011 and -4% in November alone). In Coated Woodfree, we believe the recent improvement in the demand world was mainly due to buyers switching from Coated Mechanical, rather than due to any improvement in the underlying demand drivers for Coated Woodfree. We believe orders for Christmas business boosted Coated Woodfree (for which prices have been weakening), instead of Coated Mechanical (for which prices have risen this year).



Good Woodfree apparent demand apparently weakened again in November (-2%, compared with +2% in October), and we maintain our expectation that the recent improvement will be temporary. This is backed up by the fact that underlying demand drivers have shown no significant recent improvements from the slightly negative situation we have seen for much of this year.

Although political and financial leaders in the European Union are making rather slow progress on budget deficit rules and bailout funds that will reassure the financial sector, the scenarios behind our forecasts in this report presume that they will not fail. Although we are not currently forecasting a new financial crisis, we do acknowledge the possibility (see "Demand – Context").

Still, even without a new Credit Crunch, businesses and consumers have reduced their spending because they are worried about the potential for a new recession, while governments have reduced their spending to try to prevent their budget deficits from going too much worse. All of this adds up to slow economic activity and not high employment.

This is reflected in the generally negative demand drivers that we are using in the bottom glass. Examples of weak drivers of European paper demand are fairly widespread.

What is expected is a drop in price advertising in 2011 in France and the UK, and less advertising is predicted to be in Italy, while Germany is expected to be the only major market with advertising in growth, at around +2% (before inflation). Supermarkets, Pharma

has been reporting a steady slowdown in German magazine advertising growth each month, to +3.1% for the year to October 2011, compared with around +3.8% in September (and higher growth rates earlier in the year). Overall, the picture suggests a drop in Western European magazine advertising pages.

Moving with magazines, consumer magazine circulation is falling in the UK, because of closures. Although the decline in circulation was earlier in the first half of 2011 (which was already a slowdown from growth of +4% in the second half of 2010 and +3.2% in the first half of 2011), this does not include magazines which stop publishing, nor the UK's largest circulation title, the TV magazine, which is no longer in the printed format. In Germany, meanwhile, total magazine circulation is continuing to fall by around -1.2% to -1%, as it has been for two or three years now. The quarterly declines this year have been -1.8%, -1.5% and -1.4%, respectively.

In the mail sector, the UK's leading carrier, Royal Mail, reported a -4% drop in letter volumes in the six months to September 2011, with volumes down by -32% in the past five years. Not only this, but further falls are expected to result from a new scheme between the UK government and the direct marketing industry, as set up a website by April 2012 that will enable businesses to opt out of receiving all advertising mail.

Before the new opt-out scheme was announced, Royal Mail had predicted that letter volume declines would continue at around -3% per annum for the next five years. La Presse, meanwhile, the national paper in France, reported a "surprising" decline in volume of -3.4% in the first half of 2011. Germany's Deutsche Post (DP), also reported a structural decline in mail volumes in the third quarter, "due to e-substitution", although the company did not put a figure on the drop.

In addition, the media landscape is about to change once again, with the rise of new third platform media, in particular Facebook, fighting for a share of the advertising/marketing pie.

In the printed book sector, a recent case of Woodlark Paper, sales in the UK have been falling by -4% to -10% in recent months, although these declines are in comparison with a strong year earlier (partly) which was boosted by paperback sales of the first book in the highly successful "Twilight" series of books in the second half of 2010.

With almost all of the available short-term demand indicators pointing to falling volumes of printed materials, the printing sector might be expected to be suffering, but increasingly, the surveys from the two largest print sectors in Europe (Germany and the UK) have actually been rather contrasting in recent months.

In Germany, the picture generally is rather negative. Printing industry sentiment has been hovering down and below the zero mark for a year or so, although the last couple of months have been below the line. However, the September figures for the coming 6

months are much worse, with the last couple of months showing far weaker confidence than earlier in 2011.

In the UK, in contrast, the latest growing industry survey (Q3 2011) showed improved business conditions, with more companies reporting third-quarter order levels being normal or better for the time of year, and operating costs and lead times rising. Short-term expectations were also quite good, with more companies expecting an improvement than a decline, and the balance of companies expecting no fire, rather than fire, markets is slightly positive, too.

There are rather contrasting evidence do not combine into a very clear picture, but the pessimistic expectations in Germany do at least reflect a market generally in decline (judging from the demand drivers), while the optimism in the UK is probably more related to the low starting base, given declining demand for a range of processing needs in that country.

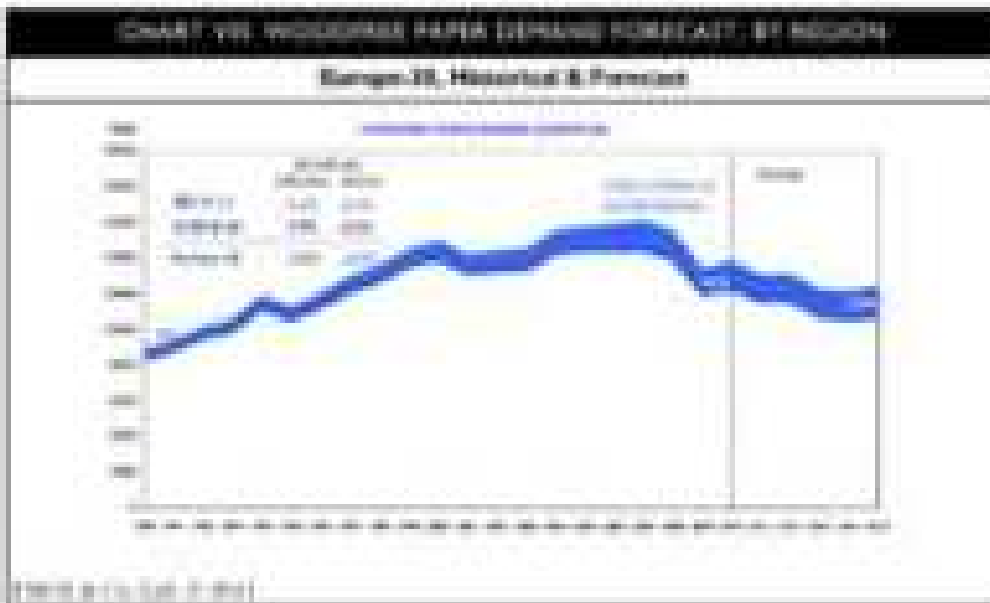
In our view, almost all of the available indicators point to real underlying consumption being in decline, which would suggest that the recent improvement in the Council Woodflow against demand trend does not signal a turnaround yet.

However, we do expect that the financial markets and consumer nerves will soon calm and, in due course, when companies and consumers get more used to the new economic situation, spending will gradually becoming more normalised again.

From the mid-2000s, we do not expect European Woodflow demand to return to growth in 2012, helped by a (temporary) economic and marketing and editorial boost from the Olympic Games in London (the last European Olympics - in Greece in 2004 - helped the economy to recover from the very weak 2003). In addition, the Euro 2012 football championship, which should benefit not only the two nations of Ukraine and Poland, but also the press in the nations taking part, as much of Europe could not a consistent boost.

The forecast improvement will begin from a negative position, and although we are forecasting a return to demand growth during 2013, the delayed start of the improvement means we have downgraded our forecast for the full year from positive to slightly negative.

1.2. Demand: Long-term Outlook

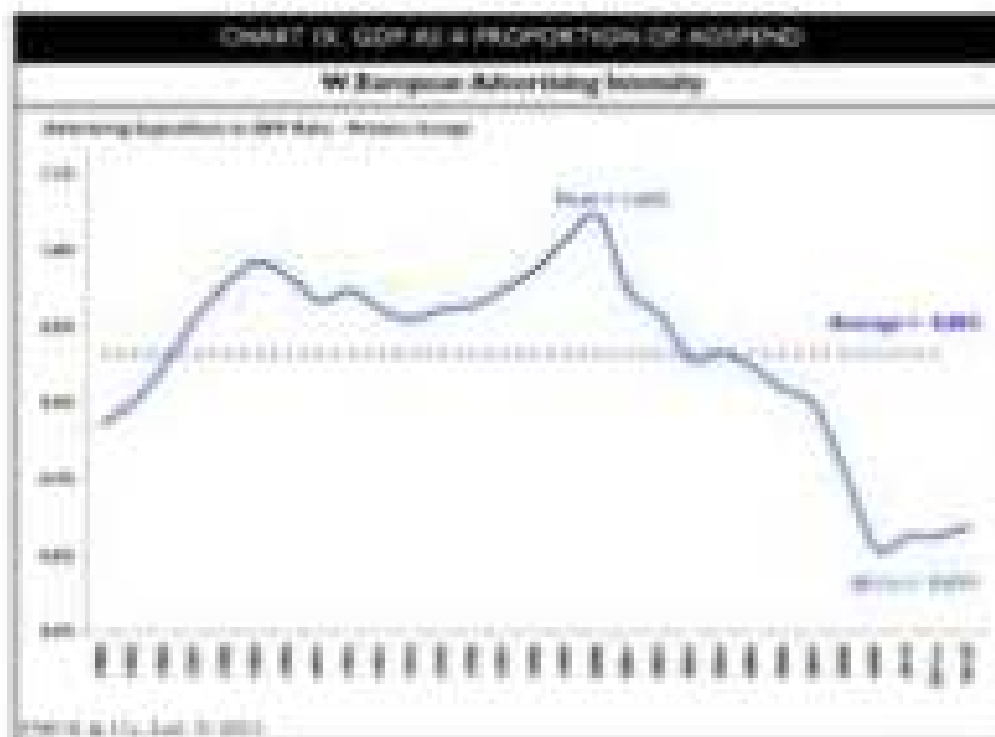


We mentioned earlier that the upturn in 2011 is only expected to be temporary, followed by a return to decline in 2013. This is partly because there are few strong growth drivers either in Europe or worldwide, but mainly because we expect fairly dramatic cuts coming by the new US government, following the Presidential election in Nov. 2012. The current government is expected to keep close to the bare minimum spend of the election, to avoid closing courts, but a new budget agreement will be necessary, once the election is over. This process, and the budget cuts themselves, are expected to have a dampening effect on the USA and global economy in 2013, and that includes Europe. We expect the deeper cuts to be implemented in 2013, and perhaps also stretching into 2014. However, by 2015, we predict that families, businesses and consumers will have ceased being panicked.

Eventually, with the storms of crisis weather wiping clean on bank credit and consumer spending, we are forecasting that the market cycle will begin to improve as the year progresses in 2014. However, although this is expected to mean a return to some paper demand growth in the second half of 2014, it will not be enough to counterbalance the negative earlier part of the year, meaning demand over 2014 as a whole will still be down. 2015, in contrast, is forecast to be a year of growth again, as the cycle continues on its upward trend.

Overall, the demand cycle (2010-2015), we are forecasting is far long-term as negative demand. This is largely because most of the outside driver influences on WOLFFHARDT PAPER demand during the forecast period are expected to be negative, outweighing the few positive influences. As shown in these forecasts, the negative effects will be most strongly felt during the time of a (global) economic downturn – i.e. 2013.

1.2.1 Long-Term End-Use Drivers – Advertising Expenditure



The above chart shows the ratio of Advertising Expenditure (Adspend) to Economic Activity (GDP). Following significant increases in the 1960s and 1970s, the proportion of Advertising spend in the general economy has been falling since the beginning of the 1980s. It appears that this long-term downcycle may have reached a turning point in 2009, and that (from a lower base) advertising activity can increase some of its lost ground within the economy.

In modern society the need for Advertising and Marketing activity to help all the wheels of economic activity to rotate, especially in a world where rationalisation are an exponentially increasing trend. The roadspiral through the "noise" is more vital than ever. Although paper is no longer the main medium of choice, the Internet is limited. The role of paper continues to be important for high quality communications and marketing. We believe the main potential upside for Woodfree Paper demand are to be found in the Office Papers, Print and Magazine segments.

We briefly outline some key long-term end-use demand influences on the following pages. However, the overall conclusion is that the positive, neutral and negative balance will follow the zero line in most sectors, and as such, the overall long-term demand trend for woodfree paper demand will be flat decline.

1.3.2. Long-Term End-Use Drivers - Social Networking Media

This section of the report takes a look at a new, recent development - Social Networking Media (SNM) - that is changing the way the Internet is being used and has the potential to be an integral part of the New Media for the commercial advertising/marketing world.

Online Social Networks are widely known nowadays, but their future remains unclear. The main website for Social Networking is Facebook, and there are numerous others, such as Twitter, Google+, LinkedIn, Bebo, Myra, NextVZ, Tuenti etc. In the words of the E.U. "The emergence and popularity of online social networks in recent years has changed the Internet ecosystem leading to a more collaborative environment. Nowadays, hundreds of millions of Internet users participate in social networks, form communities, produce and consume media content in revolutionary ways."¹

Although its roots were in personal communications, the widespread success of Social Networking has increasingly attracted commercial interests and has started to give rise to a whole new medium for advertising, marketing and promotion. We use the term Social Network Media (SNM) to describe the media that are involved in these types of marketing activities.

According to Comscore, a company that monitors and measures Internet usage and behaviour, the reach of Social Networks has grown dramatically in recent months and is now around 85% of Internet users in most European countries, with an estimated average for Europe as high as 92.4% in September 2011.

The dominant SNM website is Facebook, with over 850 million active users worldwide, including an estimated 250 million unique visitors in Europe alone (September 2011 data). Comscore estimates that the reach of Facebook is 70% to 80% among all Internet users in most European countries, while the average among all of the top 5 EU countries is about 75%. However, these figures may be overstated, as a single person may have registered more than one unique visitor name. Even so, the percentage reach is undeniably high.

Average time spent per user on Social Networking sites in Europe is estimated to have grown to 280 minutes per month (September 2011), i.e. almost 12 minutes per day, with many active users spending as much as one to three hours per day on these Social Networking websites. Users are not confined to teenagers and children, but are evenly distributed across all ages of the population.

Online Social Networking is a relatively new category, which is developing and growing rapidly alongside and integrating with other Internet systems, such as email, search engines, web browsing, video and phone chat etc.

With widespread and immediate access to the Internet for almost all users, through Broadband, Wi-Fi and Mobile Internet, the spread of Social Networking will continue to grow and establish itself as a means of modern communication (the post, telephone and email).

Because of the high level of activity and widespread penetration of online Social Networking, the appeal of SPN is increasing to Advertisers, Publishers and Mobile operators (especially Facebook). Almost all products and services have or will soon have a Social Network page. The real inquiry will be on Facebook.

This represents something of a revolution in the world of Advertising and Marketing.

According to Zenith Optimedia, the global growth of digital advertising on the internet is expected to be one of the fastest, forecasted to grow between 18% to 30% pa.

US\$ million (2010 exchange rates):

	2010	2011	2012	2013	2014
Display	\$21,646	\$25,362	\$29,940	\$35,557	\$41,446
Growth pa		18%	18%	19%	20%

However, most of these adverts are simple paid for display ads on websites (e.g. Google and Facebook site banners).

In the Social Network Media world, the advertising and marketing activities and funding are much broader and more varied than simple paid for advertisements.

In addition to so-called "Society-Funded" Adverts (e.g. ads banners on Facebook etc), there are "Society-Driven" Adverts, which have a "click here" or "like" button to drive users onto the Advertiser's Social Networking page. These "like" buttons represent personal endorsement for the advertiser's products, which are then associated with the individual user, and the user's network of "friends". Already, the brand Coca-Cola has around 20 million fans of its Facebook page, growing at 1.7 million every week.

Moreover, as soon as a user has agreed to become a fan on a Social Networking site page, the marketing/retailer can provide a wide range of offerings to encourage and engage customers, including discount coupons, product information, news, product support, client feedback etc. Sometimes users will choose to "Subscribe" to an advertiser's page too, in order to receive regular updates of these offerings (e.g. Twitter).

The growth of Facebook.com as an Advertising Media provider is currently being developed, ahead of the company's announced plans to launch first on the Social Market, probably with an IPO in April 2011. According to eMarketer, Facebook's global advertising

revenue is expected to double to US\$1.8 billion this year alone. If the historical growth of Google.com is anything to go by, Facebook could reach an advertising income of over \$20 billion by 2014.

Questions surrounding the growth of Advertising and Marketing on Social Networking websites are numerous and there have already been several cases of abuse and invasion of privacy. However, in time, we expect these issues will be resolved and the Social Networking Media companies will eventually establish themselves solidly in the Media world, alongside other forms of advertising on the Internet, Television and Print.

Although Facebook may double its revenue this year, the impact is negligible or non-existent for print advertising as far. For example, in Germany where Social Networking is as popular as anywhere, Magazine advertising has continued to grow by around 2% in 2011, despite a weak economy. But the DPM development will be important to monitor in future. We expect that Social Networking Media will become an increasingly important subject for Paper based media and paper companies, either as a threat to the printed version of their end-user base or as an opportunity for stimulating new print direct marketing services.

At this early stage, it is difficult to distinguish between hype and reality. It has yet to be established how effective and valuable the response to all the DPM activity really is to the advertiser/marketer, how much companies are likely to spend on it and how this might affect other parts of their media spending mix. Until these issues can be established, what we hope will soon become more clear as the DPM development unfolds, it is impossible to distinguish whether the rise of DPM is just another factor in the continued trend of Internet and Online Advertising, which is already fuelling into the DPM's paper demand forecasts, or whether it will add further downward pressure to the existing negative demand trends.

However, we feel it is important to give our clients advance warning of these developments. If you have an interest in this subject, please contact ENCE for further information.

series of as yet undefined policies that will certainly involve subsidies for renewable resource sectors, financed by further taxes on fossil fuel/coal use. This is likely to be more beneficial to the Pulp and Paper sector than others, especially as the Paper sector is already on the way to fulfilling its potential to become less fossil fuel dependent and more energy self-sufficient and biomass dependent.

For the Office Paper sector, this will benefit the production side, because of the inherent efficiencies and low fossil fuel needs for paper-making integrated with pulp. But it will also benefit but at least have a reducing negative impact on the demand side, as companies realise that reductions in Office Paper usage have less (or insignificant) impact on their fossil fuel/coal usage reduction targets.

Electronic Billing and Paperless Statements are another long-term demand for **Unmeasured Woodfree** paper demand. Electronic billing is growing by high double-digit percentages, and this is a development we believe will have a long way to run, with strong demands potential for printed bill/invoices. Printed statements, memoranda, e.g. from banks and policies, have been under threat for some time, as users switch to "paperless" computers. However, we believe much of the switching has already taken place, so this may not be a dramatic negative to the larger sector, with a billing probably representing the greater share.

1.2.4. Long-Term End-Use Drivers - Advertising/Marketing Print

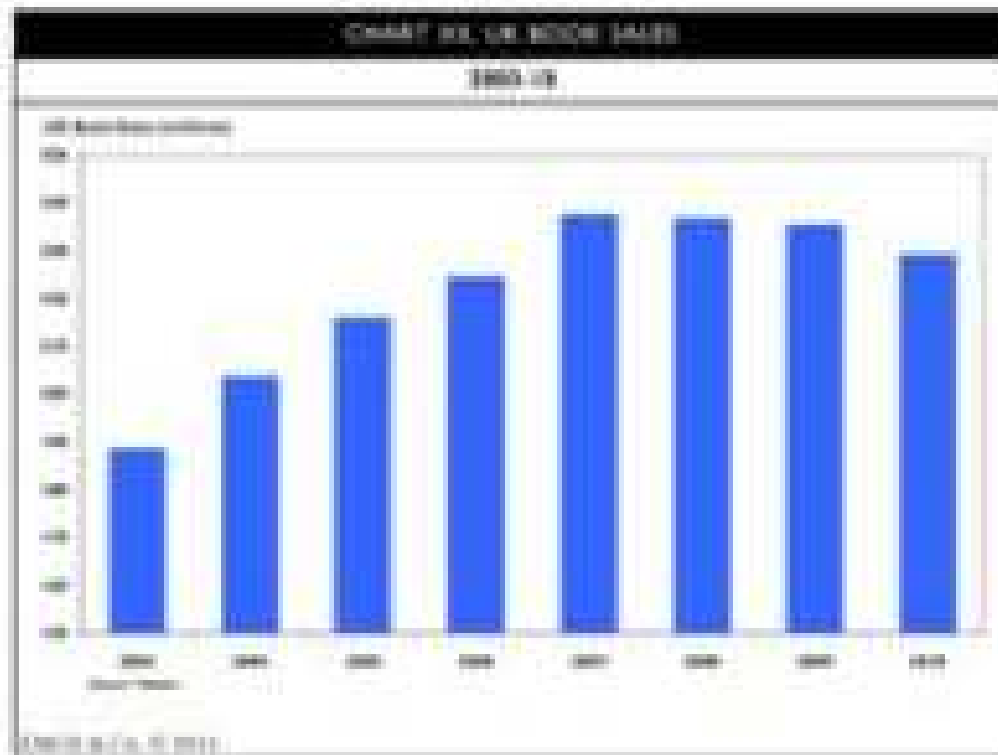


In the **Magazine** sector, meanwhile, the sector would benefit from any growth in total advertising expenditures. However, magazine advertising is being hit hard growth in the advertising market as a whole. This is partly due to falling circulation of magazines, which are losing readers who are spending more time using other media. Although there is potential for growth in total advertising, any growth will be slower in magazines, due to falling circulation. Also, any advertising growth would depend on economic confidence, which is expected to be in short supply for most of the forecast period. As such, the outlook for **General Wastebins** used in magazines is negative for most of the forecast period.

Reports from the retail **Hall** sector in several mature markets suggest that the downturn in the volume of printed orders and advertising material is on a long-term downward trend, as consumers progressively use more electronic means of communication. Although Direct Mail has a powerful impact for its users, marketers are attracted by new alternative electronic routes, now including Social Networking Media too. This is a long-term demand downside for **Unsorted Wastebins** (for the envelopes), and a combination of **Unsorted** and **General Wastebins** (for the content).

Catalogues/Brochures/Leaflets and Corporate Printed Communications, meanwhile, are expected to continue in the trends of becoming slower, publishing less often on, in some cases. Businesses are becoming more focused on on-line things and a shift to their primary media route, while printed marketing material plays at best a good support role, or at worst no role at all.

4.2.3. Long-Term Fuel for Drivers – Books



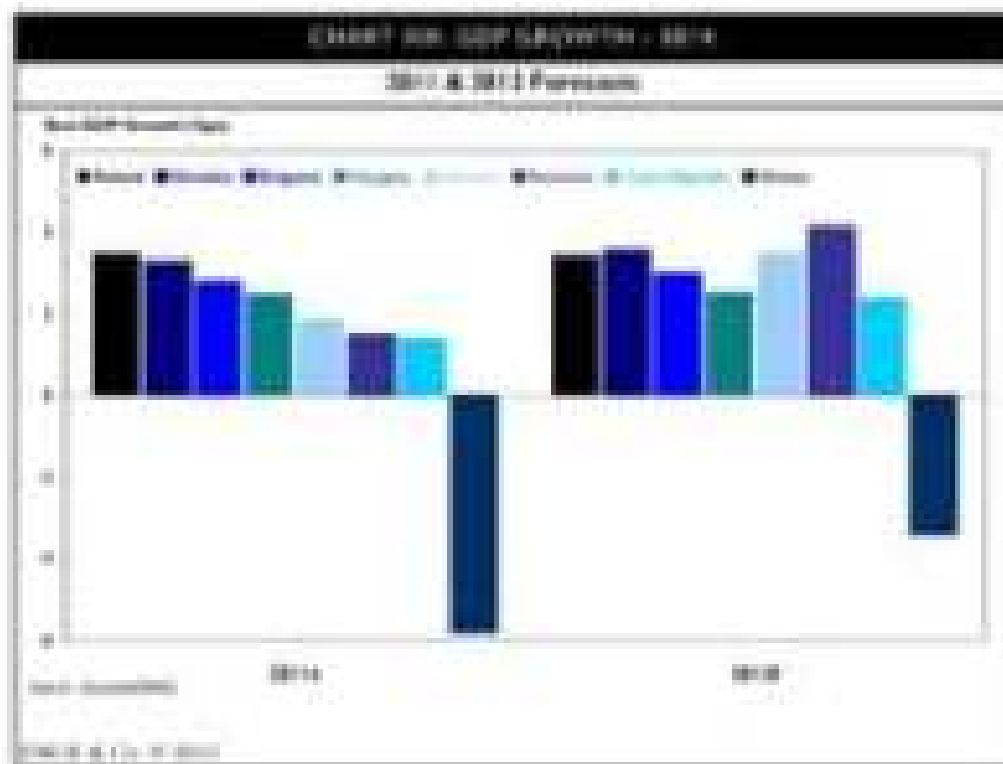
Finally, the outlook in the Books business is mixed. Overall sales of printed books are in many cases falling due to competition from e-books on tablets and e-readers like the Apple iPad and the Amazon Kindle. But much of the decline is in the paperback book business, which is more focused on Uncoated Mechanical Papers.

In the book segments that use Woodfree Papers, especially Coated Woodfree Sheets and Uncoated Woodfree Folds in the high-end book segment, e.g. art books, leather coffee table books, etc., we believe e-readers/tablets are less of a threat, because they do not compete well in terms of displaying photographs and other pictures that call for a heavy focus of high-end books.

As such, we expect the outlook for high-end books may actually be no worse than stated in the long-term, although these sectors depend on growing wealth/disposable income, which is not as all good as the short-term.

1.3. Demand: Eastern Europe Overview

Outlook uncertain, but still a growth region in long term



Like Western Europe, most economic forecasters have downgraded their growth expectations for Eastern Europe from just prior, mainly due to troubles in the region's main export market. Western Europe (like Western Europe) general economic growth in Eastern Europe is still expected to be at a fairly respectable level (e.g. the Consensus Economic Forecast for Eastern Europe is for +4.4% growth this year, followed by around +3% next year, down from earlier forecasts of around +5% in 2010).

This resilience is due to a combination of fairly robust domestic consumption, together with continued strong income from commodities (Brent Crude Oil prices have been above USD100/barrel for most of this year).

This is particularly true of Russia (which is not part of our EEurope 14 "region", but which is included as a separate brief section in this report, but also for those parts of the Eastern European economies that trade with Russia).

Many of the countries in our EEurope-14 group having quite healthy, with Poland leading the way amongst the larger markets, with GDP growth expected to be around +4% this year. However, the second and third-largest markets are being hit very well. The Czech Republic (2nd largest) is expected to grow by between +1% and +2% this year, but growth has slowed considerably, and the country is not far from recession (the same applies to the 3rd largest market, Slovakia). The 4th largest market is by far the worst performer in the region, as Greece is expected to see its economy decline by -1% or worse this year, for well-publicised reasons, including deep government spending cuts. The rest of the markets by paper consumption are all performing fairly well, with economic growth roughly in the +2% to +4% band in Hungary, Romania and Slovenia. The strongest recoveries are underway in the Baltic states (which is perhaps no surprise considering how badly these economies were hit during the Credit Crunch), but at only 1st, 10th and 11th largest in our EEurope-14 group, the overall influence of these markets is modest.

Short-term development aside, our long-term forecast for the EEurope-14 region is based on a steady recovery from the trough of the Credit Crunch, with the exception of Greece, whose sustained economic growth is predicted to be some years away. For the EEurope-14 region as a whole, we are forecasting that GDP growth in 2013 will average +0.1% pa.

In terms of advertising expenditures, Wiser is forecasting growth of better than +20% both this year and next in Russia, and Zenith Optimedia is forecasting that Russian growth in the coming few years will be strong enough to take it into the top 10 advertising markets of the world by 2013 (compared with 17th spot currently), while for Eastern Europe as a whole, Group M and Zenith Optimedia are forecasting growth either side of the +10% mark. Care earlier made prior forecasts for the region.

This looks well for short-term demand for Coated and Uncoated Woodfree Resin, in particular.

The outlook for Co-Nat paper, meanwhile, should benefit from moderate growth in the office and service sectors in general in EEurope, despite high unemployment levels, which are expected to take some time to fall in the EEurope-14 region. In the largest EEurope-14 markets, unemployment appears to be fairly stable at 11-12% (ignoring seasonal fluctuations), but it is not yet showing any clear downward trend, except for in the Czech Republic and that decline is seasonally gradual.

Woodfree paper demand in EEurope-14 has actually been very weak in 2011, with the European crisis in general and Greece in particular weighing down demand. Our updated demand forecasts for 2011 are -4.8% for CWF and -5.5% for UWF.

In the longer term, meanwhile, we are forecasting overall demand growth for both Coated (+4.6% ppa average) and Uncoated Woodfree (+4.0% ppa average), which includes the big

decline in 2021, based on relatively stronger future advertising expenditures and improving domestic economic conditions.

Russia

Separate from E.Europe/NA, in Russia alone, growth is predicted to be stronger than the average for Eastern Europe as a whole, as Russia's economic situation remains fairly healthy. Despite a downgrade due to high inflation and the European crisis since our last forecast, GDP growth is nevertheless still forecast to be +4% in 2021, the country has a budget surplus, and unemployment is on a clear downward path, falling from 8.4% in 2020 towards 6% now, which is a promising indicator for Unimarket/Unimarket C&S demand. And W&M is expecting double-digit growth in Russian magazine advertising in 2021 and 2022, which is also a positive indicator for Causal Woodfree paper demand. Adverts usually account for something less than half of a magazine's page costs, but the expected healthy growth in the sector is nevertheless predicted to contribute to overall long-term growth in (paper) consumption.

Despite all of this, Russia's apparent demand has actually fallen in the C&S since the year, despite growth in demand for the magazine grades (as we would expect), this below the general decline in C&S is due to printers using more C&S Folia than coated C&S Folia, to reduce costs. We also believe C&S demand has been unimpressive, due to inventory reductions this year, following very strong growth in 2020. Taking into account the weak apparent demand in 2021 and the economic downgrade since our last report, we have updated our long-term demand growth forecasts for Russia to +4.0% for Causal Woodfree and +3.4% for Unimarket Woodfree.

J. A. Demond: Current

Debt crises not fully solved yet – economies remain vulnerable

In recent weeks, markets have calmed but worried that previously about the prospects of European economies such as Greece and Italy defaulting on their debts. Fortunately, as expected, the phase of acute panic appears to have passed without more serious damage. Plans of the European Union has agreed to set up a financial stability pact, which is expected to include new financial regulations and bailout funds. It is hoped and expected that these measures will both ease existing worries and also prevent any future crises. In addition, some of the world's major central banks (e.g. the US Federal Reserve, the European Central Bank, as well as the central banks of Japan, Switzerland and Canada) are making it cheaper and easier for each other to borrow from each other. Furthermore, the European Central Bank has guaranteed low-cost loans to banks until 2012. The markets have reacted positively to these developments, and much of the previous panic seems to have disappeared.

This is all in line with our previous expectations and base forecasts, that the Eurozone problems would be resolved without spreading into a broader transatlantic crisis.

Despite the positive reaction, the problems actually remain unresolved so far, and how the markets will react to any concrete agreements remains to be seen. If they feel that the arrangements made by the new pact, if and when it becomes a reality, are not strong enough, the price of sovereign credit could easily deteriorate again. Another risk is rising. The politicians and central bankers have so far acted far too slowly to satisfy credit markets, so it is not impossible that credit markets could get jittery again, if agreements for concrete measures are delayed further.

However, the European economy is in a recession/lowdown, and it is not clear that economic growth will be strong enough to allow participating governments to reduce their debt levels, as their growth more reduced income, as well as reduced spending.

So although Europe's governments appear to be using action, a sovereign default remains a possibility, and if one or more European countries did default, then it is highly possible that banks would stop lending again, causing a new Credit Crunch.

Furthermore, none of this takes account of the serious debt problems in the USA, (or Japan), which will have to be addressed.

Many of the future economic issues is an extremely uncomfortable question.

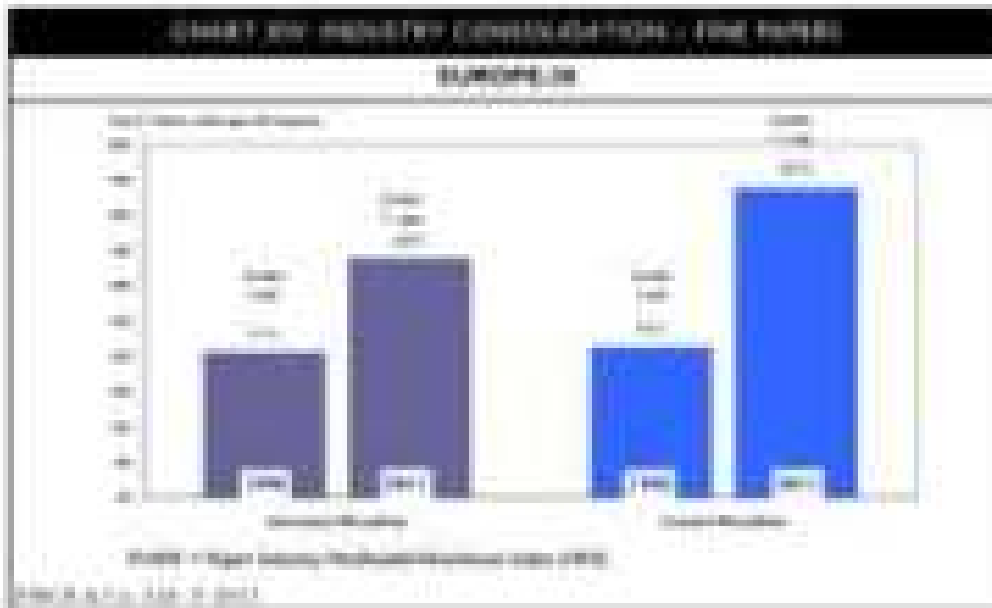
The problems of the 2008-2009 crisis have only been passed down the line, from banks to the governments that rescued them. If a crisis appears this time, the difference this time is that countries are at risk, not just companies/banks. Moreover, these countries are the leading economies in the World - namely Europe, USA and Japan.

If these countries, for whatever reason, are unable to resolve their deep fundamental issues, a new Credit Crunch would ensue. Especially if it arises from something unexpected, a new Credit Crunch on this basis could create a whole new level of crisis.

If that happened, we would expect an economic downturn affecting the whole World, on a scale previously unforeseen.

2. Consolidation and Capacity

2.1. Consolidation Trends, P-100s



Consolidation in the Windpower industry in Europe has produced a top-3 share in 2011 of 80% in CWP, while the USWP share is only 40%. The USWP sector has a fairly low P-100 (less than 100), but the CWP side of the business remains quite concentrated with a P-100 of 140.

Historically, a relatively high P-100 of less than 100 has been considered not highly concentrated, which obviously leaves scope for significant consolidation when the USWP sector

The situation is rather different in the CWP sector, however, as any realistic merger would push industry concentration past the level that would attract the attention of competition authorities. However, the combination of USWP and Polyphaser helped to break new ground in Europe, as it originally pushed the P-100 level way past the traditionally accepted 100 to more than 200 in the Unsubsidized Mechanical sector and above 300 in Coastal Mechanical. Even though capacity focused here has been brought down back down to 1000 and 1400.

We have calculated that any merger or acquisition involving any of the 3 Leading Suppliers of CWP (Sage, Lappe, USWP) here listed in Europe would push the P-100 above 200, which may now be a possibility based on the example of Unsubsidized Mechanical. However, a tie-up between the larger producer, Sage, and another of the Top 3 would push the P-100 above 300, which we would expect to draw very close scrutiny from competition authorities.

3.2. Consolidation – Leading Companies

The following tables highlight the volumes and earnings of Leading Suppliers in each sector in 2013 (a table for the five Leading Suppliers is shown on page 85).

TABLE 6. THE FARMER – LEADING WOOD PAPER COMPANIES					
2013 Issues (2013) – Suppliers (Average 2013 Issues only)					
Rank	Company	Issue	Supplier 2013	Issue	TOTAL
TOTAL THE FARMER					
1	WPM	10.25	20%		10%
2	STONEX GROUP	10.25	20%		10%
3	WPM	10.25	20%		10%
4	WPM/CLUB/STONEX	0.25	10%		10%
5	WPM	1.15	10%	20%	10%
Top 5 Companies		22%	100%		100%
INDUSTRY TOTAL Issues		100%			100%
Leading THE FARMER (only)					
1	WPM	10.25			10%
4	STONEX GROUP	10.25			10%
3	WPM	10.15			10%
5	STONEX GROUP	10.25			10%
6	WPM	10.25			10%
Top 5 Companies		87%			100%
INDUSTRY TOTAL Issues		100%			100%
Leading THE FARMER (only)					
1	WPM/CLUB/STONEX	10.25	10%		10%
2	WPM	10.25	10%	20%	10%
3	STONEX GROUP	10.25	10%		10%
4	WPM	10.25	10%		10%
5	ST	10.25	10%	10%	10%
Top 5 Companies		40%			40%
INDUSTRY TOTAL Issues		100%	100%		100%

Source: The Farmer, 1st to 31st 2013

2.3. Cost-Size Loading Comparison

TABLE 16. COST-SIZE - LOADING COMPARISON				
Capacity 1000 (7000 barrels)				
Name - Company	% Share of Total Ship	INDUSTRIAL CAPACITY*		
		Barrels/D	Barrels	100000
1. Arcochem	10.0%	100	100	1000
2. Shell Chemical Industries	10.0%	100		100
3. Shell Chemical	10.0%	100		100
4. BP	10.0%	100	100	100
5. Other	10.0%	100		100
Total Capacity	50%	500	100	1000
6. Arcochem	6.2%	100		6.2
7. Shell Chemical	6.2%	100		6.2
8. Shell Chemical	6.2%	100		6.2
Total Capacity	18.6%	300		18.6
Total		100%		100
Percent Total Capacity (87%)		87%		87%

*Percent Total Capacity average 87% of 7000 Barrels Capacity

Notes on the Herfindahl-Hirschman Index (HHI)

The HHI measures the degree of market concentration that exists to how many participants are offering essentially the same or a similar product in a defined market. The index is now considered to be the most well-established and important measure of industry concentration. Essentially, the HHI is the sum of the squares of the market shares of all players.

Essentially, a HHI of over 1800 would have meant that an industry was highly concentrated, whereas below 1800 the industry would be described as Moderately Concentrated, or below 1000, Less-Concentrated.

In the past, a HHI of more than 1800 would have made further mergers/acquisitions difficult, although more data suggest the competition authorities may be prepared to consider deals that push the HHI above 2000 (as it currently is in the Chemical sector).

2.4. Capacity Projections, CFF – Storage details

TABLE 11. CAPACITY FORECAST CHANGES BY MS – CFF								
EUROPEAN WOODPANELS* includes Laths, Real Art (Handmade) and Pigmentwood								
MS	2009 Cap	2011 Change	2012 Change	2013 Change	2014 Change	2015 Change	2016 Change	2017 Cap
SAPM Europe	890							890
AUSTRIA	890							890
Carimate	890	890	890	890	890	890		890
Antares/Buget	180							180
BELGIUM	380							380
Carimate	380	380	380	380	380	380		380
Chen (Aps)	50							50
DENMARK	90							90
Carimate	90	90	90	90	90	90		90
Scot Group	1020							1020
PL EuroSAPM	390		390				390	
Lam	430							430
FINLAND	1410		330				330	1410
Carimate	1410	1410	1410	1410	1410	1410		1410
Carima Kares	580							580
Arjo-Wygna	180							180
FRANCE	920							920
Carimate	920	920	920	920	920	920		920
Hardwood (SPP)	850							850
SAPM Europe	415		330				330	415
PL Real	220		220				220	
Scandin	220		190				190	80
Scandin (PowerLine)	50							50
GERMANY	1800		140				140	1840
Carimate	1800	1800	1840	1840	1840	1840		1840

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CAPACITY FORECAST December, BT 1915 - 1916 (continued)								
Continued								
	1915	1916	1917	1918	1919	1920	1921	1922
Item	Cap	Change	Change	Change	Change	Change	Change	Cap
Belgo-Porto	50							50
Carls-Lund	10							10
Chenard-Cremone	10							10
ITALY	110							110
Cumulative	110	100	110	100	100	100		110
NORTH Europe	50							50
NET 14	50							50
Cumulative	50	50	50	50	50	50		50
Torres group (Lund)	40							40
SPAIN	40							40
Cumulative	40	40	40	40	40	40		40
Arco Paper			20				20	20
Yoko paper	10							10
Phical House			5					
Clay Index	10		10				10	
SWEDEN	10		5				5	10
Cumulative	10	10	10	10	10	10		10
Lund	40	20	20				40	
SWITZERLAND	40	20	20				40	
Cumulative	40	20						
Toto	10							10
USA	10							10
Cumulative	10	10	10	10	10	10		10
Unpublished (Lund)					20	40	20	20
TOTAL	675	210	205		200	200	205	770
Cumulative	675	615	655	655	755	770		770

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2.3 Capacity Projections, ITW - Average details

TABLE 13. CAPACITY FORECAST CHANGES BY YEAR 1990									
UNCOATED WOODPINE (Run Grain Only)									
Year	1990	1991	1992	1993	1994	1995	1996	1997	1998
Year	1990	1991	1992	1993	1994	1995	1996	1997	1998
1990	100								100
1991	75								75
AUSTRIA	405								405
Canada	405	405	405	405	405	405			405
Green (App)	50								50
DENMARK	50								50
Canada	50	50	50	50	50	50			50
Sweden	470	50						50	470
Latv	400								400
FINLAND	1270	50						50	1270
Canada	1270	1270	1270	1270	1270	1270			1270
1992	110		110					110	
1993	100								100
Chandona	105	10						10	115
Chandona (APP)	115								115
Green	40	40	50					40	
Chandona	50								50
Paris	50								50
Asia/Pacific	10		10					10	
FRANCE	1070		120					120	120
Canada	1070	1070	120	120	120	120			120
Sweden (APP)	170								170
1994	110								110
1995	110		110					110	
Green	100								100
GERMANY	1000		110					110	110
Canada	1000	1000	110	110	110	110			110

1990-1998, 1990-1998

1990-1998

CAPACITY FORECAST December 2011 (MMBtu per day)									
Continued									
	2010	2011	2012	2013	2014	2015	2016	2017	2018
Item	Cap	Change	Change	Change	Change	Change	Change	Change	Cap
Poland (Offshore)	180								180
Spain (Onshore)	170								170
Other	75	-25	-25					-25	0
ITALY	280	-25	-25					-25	230
Continued	290	320	320	320	320	320			320
Other	75								75
MEXICO	75								75
Continued	75	75	75	75	75	75			75
Portugal (Onshore)	700	800						800	800
Portugal (Offshore)	800								800
Russia	20								20
PORTUGAL	1500	800						800	1420
Continued	1320	1420	1420	1420	1420	1420			1420
Other	240								240
Romania (Onshore)	50	20						20	
Russia	50								50
Russia	50								50
Other	20								20
Other (Other)	50								50
SPAIN	800	-25						-25	775
Continued	500	420	420	420	420	420			420
Other	420								420
Spain (Onshore)	500								500
Spain (Offshore)	40								40
Other (Other)	420								420
SWEDEN	1100								1100
Continued	1100	1100	1100	1100	1100	1100			1100

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2.6. Capacity Projections, CWT - Other Europe

Table 14. Capacity Impact Summary, Other Europe - CWT									
Other Europe - Exported WWTMS Papers									
Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
	Cap	Change	Change	Change	Change	Change	Change	Change	Cap
Charlotte	45								45
Rotterdam	55								55
Yocco (Brg & Reg)	45								45
EU OVERALL	145								145
Conclusion	145	145	145	145	145	145	145	145	145

Globalstar & Co., Ltd. © 2011

2.3. Capacity Projections, ITWP – Others

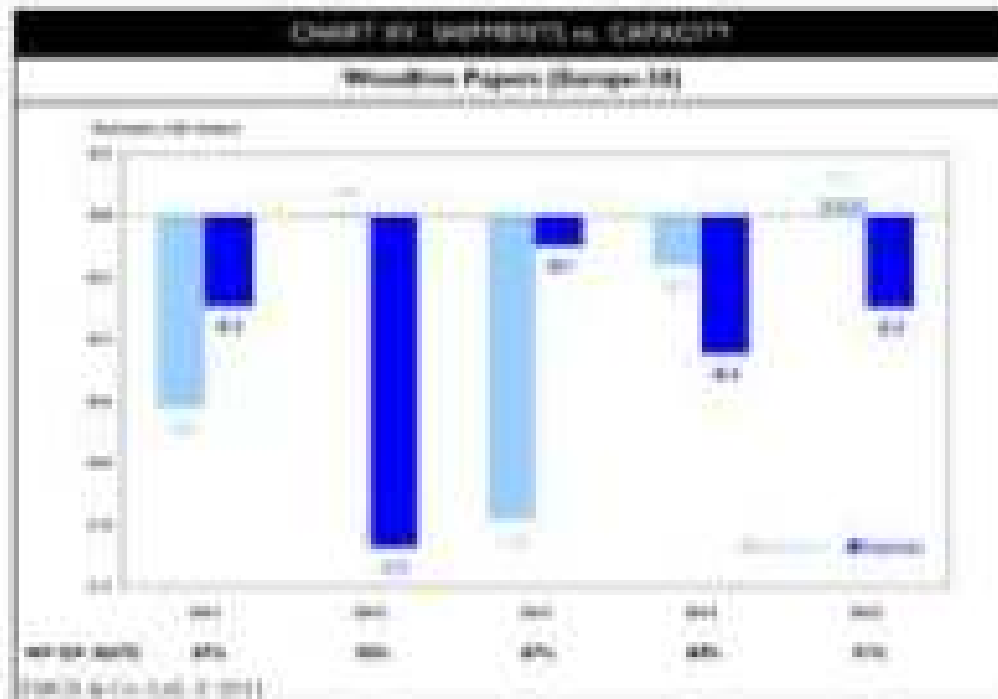
TABLE 14. CAPACITY PROJECTION CHANGES, OTHERS – ITWP									
OTHERS EUROPE – UNRECOVERED WOODPULP									
2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
2010	Cap.	Change	Change	Change	Change	Change	Change	Change	Cap.
OTHER EUROPEAN COUNTRIES									
CZECH REP.	85	0						0	85
Consolidate	85	-45	-25	-45	-45	-45			85
Others	20								20
HUNGARY	20								20
Consolidate	20	-20	-20	-20	-20	-20			20
Others	50								50
POLAND	50								50
Consolidate	50	-50	-50	-50	-50	-50			50
Others	50								50
ROMANIA	50								50
Consolidate	50	-50	-50	-50	-50	-50			50
Others	50	-20						-20	5
Others	50								50
SLOVENIA	85	-25						-25	55
Consolidate	85	-55	-55	-55	-55	-55			55
RUSSIA / ISRAELI UNIT CAPACITY									
ITP Isengard	150								150
Plant Sibirsk	450	0	15					20	480
Plant	120		50	140	0			200	120
Arkhang	80								80
Kamoy	45								45
Others	150								150
RUSSIA	1215	0	145	140	0			220	1425
Consolidate	1215	-1200	-1025	-1400	-1425	-1425			1425
Plant Isengard	145								145
ISRAEL	145								145
Consolidate	145	-145	-145	-145	-145	-145			145

Source: ENCE, Ltd. © 2011

2.5. Investment Details - Listing of Plans

TABLE 15. INVESTMENT LISTING					
Company	Plan	Year	Description	Est.	Act.
W. SUBSIDIARY					
Retiree				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Plan				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2012	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2013	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2014	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2015	Retiree plan of Acme Corp. (Acme Corp.)	100	
Retiree				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2012	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2013	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2014	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2015	Retiree plan of Acme Corp. (Acme Corp.)	100	
Plan				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2012	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2013	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2014	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2015	Retiree plan of Acme Corp. (Acme Corp.)	100	
Retiree				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2012	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2013	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2014	Retiree plan of Acme Corp. (Acme Corp.)		10
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Plan				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2012	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2013	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2014	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2015	Retiree plan of Acme Corp. (Acme Corp.)	100	
Retiree				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2012	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2013	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2014	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2015	Retiree plan of Acme Corp. (Acme Corp.)	100	
Plan				Est.	Act.
Acme Corp.	Acme	2010	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2011	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2012	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2013	Retiree plan of Acme Corp. (Acme Corp.)	100	
Acme Corp.	Acme	2014	Retiree plan of Acme Corp. (Acme Corp.)		10
Acme	Acme	2015	Retiree plan of Acme Corp. (Acme Corp.)	100	

3. Demand-Supply Balance



The chart compares the demand and capacity for Woodline Papers (Europe-EM) from 2009 to 2011. The gap is highlighted in yellow.

While deliveries expected to fall by over 400,000 tonnes in 2011, while net capacity will only decline by around 50,000 tonnes. Operating Rates are forecast to fall on an average of 87%, from an average of 89% in 2010.

However, there is considerable variation between Coastal and Uncoastal Woodline mills, with Uncoastal Woodline (87%) forecast to be more oversupplied this year than Coastal Woodline (89%), on a Europe-EM basis. In line with this, delivery Lead Times have fallen sharply since joining in 2010 (see page 47).

We expect the demand supply balance to improve in 2012, however. While shipments are forecast to be more or less constant for the year as a whole, capacity of Coastal and Uncoastal Woodline combined is expected to fall by around one million tpa, due to additional closures announced since our last report. The combination of these factors is predicted to lower Operating Rates from 87% to 83%. In 2012, Coastal Woodline are predicted to see quite a strong supply-demand balance, with Operating Rates averaging 74%, while over the Uncoastal Woodline sector is forecast to be balanced, with Operating Rates averaging 79%.

In the longer term, Europe is generally expected to be oversupplied, unless papermakers close more capacity than is currently planned.

However, we do predict that additional capacity additions will take place in 2013 to 2015 (see page 37b Rb) which will help but not ending the oversupply situation.

These additional/unspecified capacity measures that we are predicting result in what we call our **Forecast Capacity**, which is the basis for our Supply-Demand balance.

In this report, we are forecasting that Operating Ratios will fall to 88% for CWP in the week 2012, then Unspecified capacity measures will help to boost them back up to 89% in 2014 and 90% in 2015. In UWP, Operating Ratios are predicted to fall to 87% in 2013, with new capacity measures helping them to recover to 88% in 2014 and 90% in 2015.

However, if the industry does not make more measures that it is currently planning then we would expect Operating Ratios to line with our **Base Capacity**, which in 2013 would only be 86% for CWP and 84% for UWP.

3.1. Delivery Lead Times



Lead Time is a key indicator of the supply chain's ability to meet demand. It is the time between the customer's placing an order and receiving delivery. Lead Time represents the lead balance in Europe between demand and supply. But they can also describe a different picture compared to the headline industry Operating Ratio data we publish.

The above chart shows Delivery Lead Times in the Woodfree sector - Lead Times measure the delay between customer's placing orders at the mill and receiving delivery.

Lead Times represent the lead balance in Europe between demand and supply. But they can also describe a different picture compared to the headline industry Operating Ratio data we publish.

Historically, the 6-week mark is seen as a watershed that puts paper sellers in a cornering position and means prices are likely to rise.

This has again been a good guide for Coated Woodfree prices, which have been falling for some months, while Uncoated Woodfree prices actually managed to fall below Lead Times for 6 weeks due to falling pulp prices and weak demand.

We expect Lead Times to remain short and tight (BT), when sustained demand & closed capacity are expected to combine into a tighter supply situation. At the moment, Lead Times could increase even further, for a while in 2012, if costs and prices show signs of strengthening (e.g. progressive increase in energy).

3.2. Demand-Supply Balance

TABLE 16. DEMAND-SUPPLY DIFFUSION						
Europe 28						
100 years	2010	2011	2012	2013	2014	2015
COATED WOODENSHED						
Demand	7652	7520	7545	7510	6770	6570
Supply	4760	4650	4640	4630	3840	3740
Sp. Ratio	62%	62%	61%	61%	57%	57%
UNCOATED WOODENSHED						
Demand	7500	7400	7370	7340	7100	7000
Supply	4990	4860	4840	4830	4510	4400
Sp. Ratio	67%	66%	66%	66%	64%	63%
TOTAL WOODENSHED						
Demand	15152	14920	14915	14850	13870	13570
Supply	9750	9510	9480	9460	8350	8140
Sp. Ratio	64%	64%	64%	64%	60%	60%
IN Europe 28						
COATED WOODENSHED						
Demand	7652	7520	7545	7510	6770	6570
Supply	4760	4650	4640	4630	3840	3740
Sp. Ratio	62%	62%	61%	61%	57%	57%
UNCOATED WOODENSHED						
Demand	6470	6380	6340	6300	5910	5800
Supply	5400	5310	5290	5280	4700	4590
Sp. Ratio	83%	83%	83%	84%	79%	79%
TOTAL WOODENSHED						
Demand	14122	13900	13880	13810	12680	12370
Supply	10160	9960	9930	9910	8540	8330
Sp. Ratio	72%	72%	72%	72%	67%	67%
IN Europe 28 (EUROPE only)						
100 years	2010	2011	2012	2013	2014	2015
Demand	11400	11240	11200	11150	11000	10850
Supply	6200	6050	6040	6030	5300	5190
Sp. Ratio	54%	54%	54%	54%	48%	48%

Source: ENGE and E. 2011



With Operating Balance being taken and the outlook for shipments remains more than positive, we expect the supply demand balance to reflect consistent oversupply for much of the forecast period to 2015, with the main exception of 2013.

3.3. Costing Papers – Demand Supply

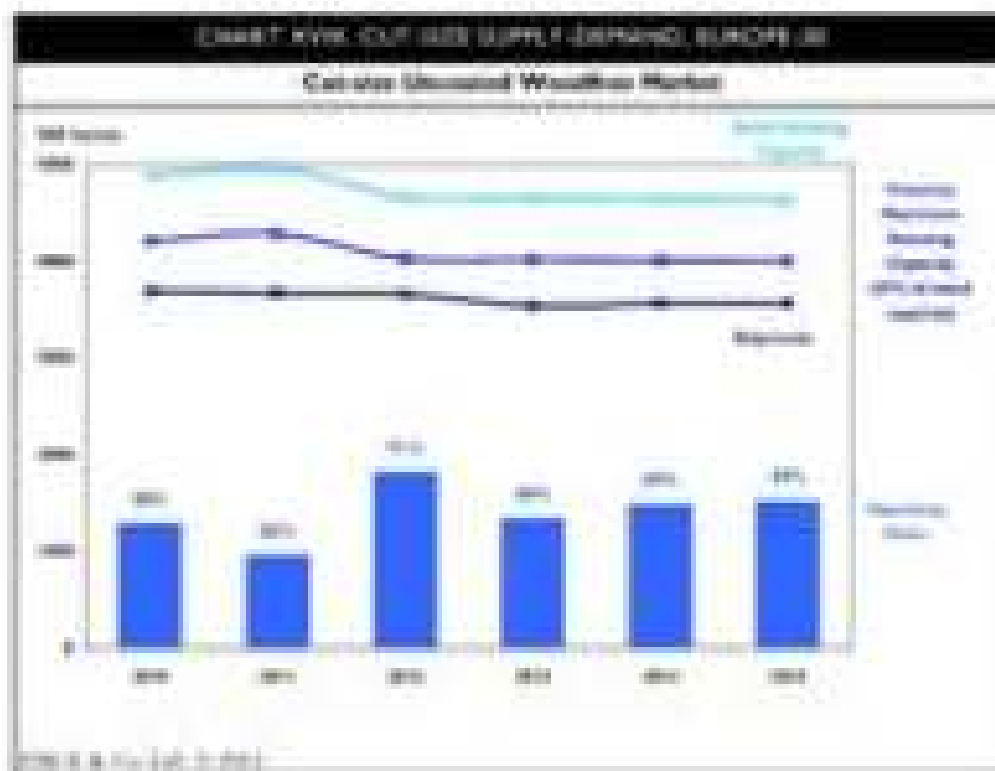


Table 17: WOOD CUT-SIDE MARKET, EUROPE 26

Europe 26

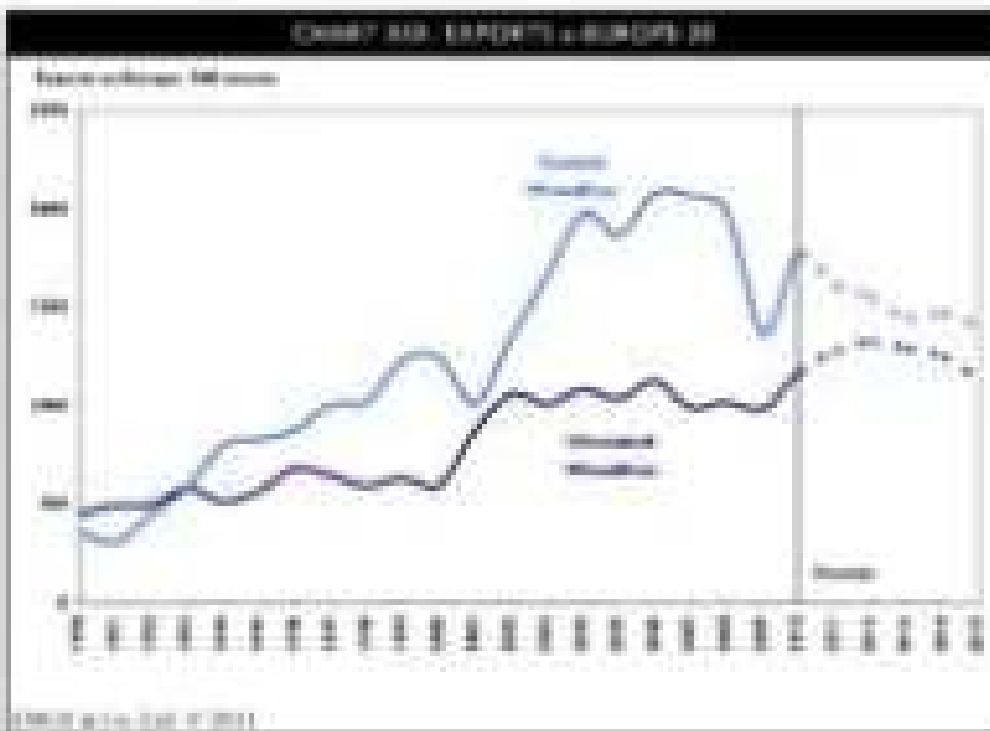
Year	Demand	Imports	Exports	Balance	Implied	Actual	Gap Ratio
					Capacity	Capacity	
2006	200	40	40	200	410	400	90%
2007	180	30	40	170	420	400	95%
2008	180	40	30	140	430	400	93%
2009	200	40	20	140	440	400	91%
2010	210	40	40	130	450	400	89%
2011	200	40	30	130	460	400	87%

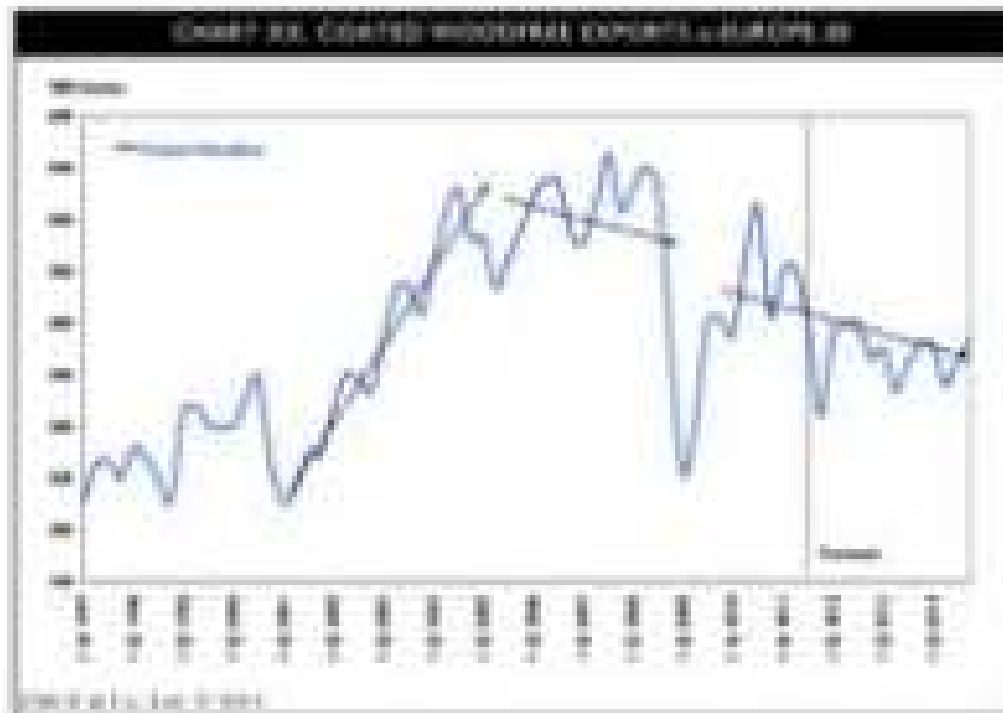
Source: ENCE (1st Q 2014)

4. Trade

4.1. Trade Forecast

Table 16. FORECAST WOOD STOCKS TO BE SAWN, EUROPE 20						
WOODSAGE PAPERS, Europe 20						
Year (mm)	EXPORTS		IMPORTS		NET EXPORTS	
	Forecast	Uncertain	Forecast	Uncertain	Forecast	Uncertain
2006	1170	1160	100	230	1070	930
2007	1400	1370	100	180	1300	1190
2008	1600	1570	100	440	1500	1130
2009	1600	1590	100	370	1500	1220
2010	1470	1400	100	300	1370	1100
2011	1400	1300	100	240	1300	1060
2012	1400	1300	100	240	1300	1060
Source: Woodsage Papers						
[2006-2011, Jan. 8, 2011]						

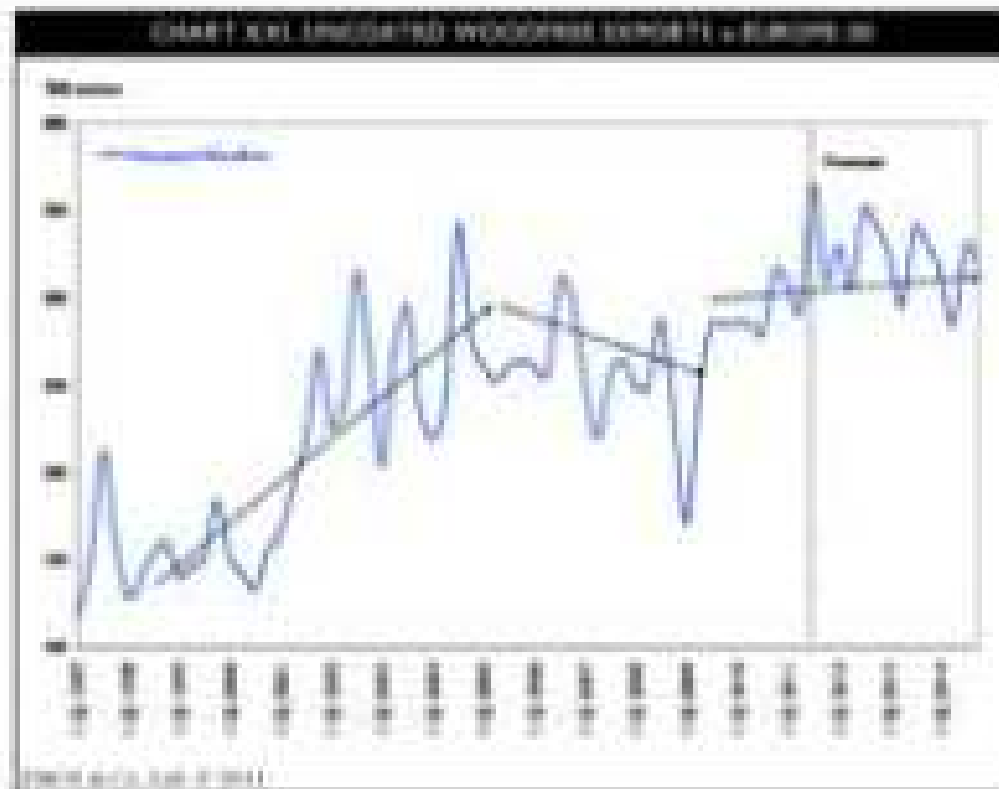




Although European mills will be helped short-term by their efforts to export to the currently weak East, we are nevertheless forecasting more or less flat (Global Woodfibre) or declining (Global Woodfibre) exports in the long term. The difference between the forecasts for the two grades is due to several reasons.

Firstly, Global Woodfibre capacity has grown massively, mostly in China, causing heavy overcapacity in the region where demand is expected to grow more strongly. Also,

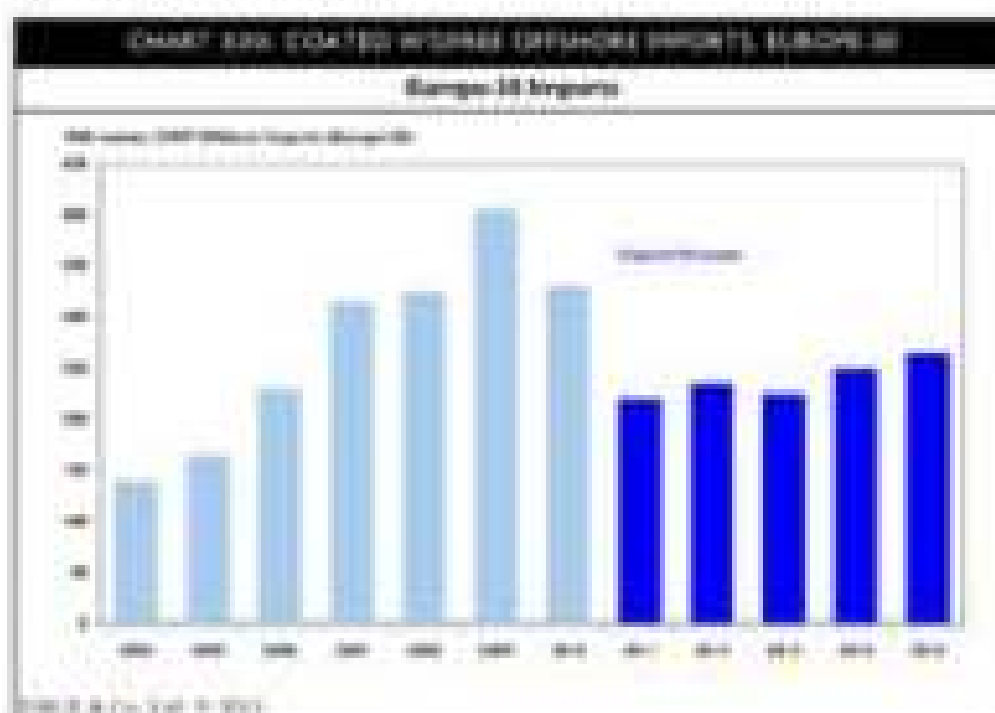
We expect Asian producers, especially those in China, to supply most of the growing demand in this region, not least because those mills have been discouraged by tariffs in the past year from exporting to North America and Europe. Although European mills have increased their exports to North America this year as a result, that is a declining market, so further export growth to North America is expected to be limited, at best. At the same time, the increased capacity available within Asia is predicted to leave European mills largely shut off from the most important export opportunities in Asia itself.



In the Unassess Woodfuel sector, growth in global capacity (and overcapacity) is expected to be less strong than in Assess Woodfuel, as we are predicting slightly lower export possibilities. In addition, Europe is forecast to have lower overcapacity in this sector, going European with stronger impulse to export than in the Assess Woodfuel sector. As a result, we expect the motive and opportunities for European exporters to be slightly stronger in Unassess Woodfuel.

This should not be overestimated, however, as we are forecasting that growth in Unassess Woodfuel exports this year and next will be balanced out by declines in the later years of the forecast, partly due to falling global demand in 2013, and partly due to capacity measures in Europe reducing the urgency to export.

4.2. CWP Import Outlook



Europe's imports, meanwhile, are not expected to vary much following this year's decline, as European demand is mainly forecast to be stable.

Against the background of a long-term rising trend of imports, the slight rise we have predicted for 2012, 2014 and 2015 are mainly due to imports into E-Europe-18 (during forecast growth years for E-Europe-18).

This applies to both Onshore and Offshore WindPower.

4.3. Estimated Diesel Imports



Table 14: OXYGENATE IMPORT SOURCES - UNDATED WDEDS

Summary: OXYGENATE IMPORT SOURCES

QTR Source	Diesel	Gasoline	Jet Fuel	Other	Total
Q1 09	45	35	10	5	95
Q2 09	50	30	10	5	95
Q3 09	45	35	10	5	95
Q4 09	40	40	10	5	95
Q1 10	45	35	10	5	95
Q2 10	40	40	10	5	95
Q3 10	45	35	10	5	95
Q4 10	40	40	10	5	95
Q1 11	45	35	10	5	95
Q2 11	40	40	10	5	95
Q3 11	45	35	10	5	95
Q4 11	40	40	10	5	95

Source: WDEDS, Citywide Imports

As shown in the chart and table above, European offshore imports of Unleaded Gasoline have remained relatively stable overall.

4.4. UWF Export Outlook

The following tables show very short-term export projections for European Woodsheds.

TABLE 26: EXPORT PROJECTIONS - UWF WOODSHEDS, EUROPE 08

EUROPE 08						
Year (mm)	Brazil	Russia	SouthAfr	Thailand	Other	Total
2008	275	55	55	100	115	600
2009	275	55	5	55	115	505
2010	275	55	5	55	115	505
2011	275	55	5	55	115	505
2012	275	55	5	100	115	550
2013	275	55	5	100	115	550

Source: E & J, Ltd. Ltd. © 2011

TABLE 27: EXPORT PROJECTIONS - UWF SHEDS 008, EUROPE 08

EUROPE 08							
Year (mm)	Brazil	Russia	SouthAfr	Thailand	Other	Total	As Share
2008	200	25	55	55	115	450	17%
2009	200	25	5	55	115	395	16%
2010	200	25	5	55	115	395	16%
2011	200	25	5	55	115	395	16%
2012	200	25	5	100	115	445	17%
2013	200	25	5	100	115	445	17%

Source: E & J, Ltd. Ltd. © 2011

TABLE 28: EXPORT PROJECTIONS - UWF RESIDUALS, EUROPE 08

EUROPE 08						
Year (mm)	Brazil	Russia	SouthAfr	Thailand	Other	Total
2008	15	25	5	25	45	110
2009	15	25	5	25	45	110
2010	15	25	5	25	45	110
2011	15	25	5	25	45	110
2012	15	25	5	25	45	110
2013	15	25	5	25	45	110

Source: E & J, Ltd. Ltd. © 2011

Although some calls in Russia, Brazil and Asia may have potential to increase offshore sales into Europe, we expect increased offshore imports to remain relatively stable in the coming years, due to overcapacity and competition among the leading European suppliers.

The LHV import forecast is not expected to vary by over as much as 100,000 tpa between the lowest and highest case, during the period to 2035.

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5. Paper Prices

Short Delivery Lead Times and falling hardwood pulp prices caused Woodfree Paper prices to fall in recent months, as we forecast in our last European Woodfree report.

Ordinarily, with demand still weak, lower pulp prices and Lead Times on a clear downward trend, we would expect further price declines in the very short term.

However, the Eurozone debt crisis has significantly undermined the value of the Euro, so the extent that pulp prices in Euros have crept up twice in the past four weeks (while falling in the other two weeks), at a time when prices in US dollars have been continuing to fall consistently.

Due to continued weak demand, overcapacity and high inventory levels at ports, among other factors, we are forecasting continued falls in the USD-based pulp price into the first quarter of next year. We do not forecast exchange rates, which means we are not forecasting any further drop in the value of the Euro, and therefore our forecast is for pulp prices to fall further also in Euro-based terms. In line with that, as well as falling Lead Times and demand, Woodfree price weakness has continued to the end of 2011.

However, big capacity cuts at the end of 2011, such as at the Raseborg and Långsäter mills (amounting for a net reduction of ~4% in European CWT capacity), coupled with seasonally stronger shipments expected in the first quarter of next year, are predicted to boost Operating Rates in 2012. In addition, there are signs that the downturn in pulp prices may be coming to slow, and we expect Chinese buyers and speculators to play a key role in reversing the pulp price decline early next year.

These factors are expected to allow Woodfree paper producers to halt the current drop in prices in Q1 2012. Following that, improving demand and confidence in the second and third quarters of 2012 are predicted to help producers keep edging prices up during much of 2012.

Further ahead, in line with our forecast of a very weak 2013, we are forecasting falling pulp and Woodfree paper prices throughout that year (and very probably into 2014, too, although that is not part of this forecast).

As far as pulp prices are concerned, we are predicting that (FAS) prices will bottom out at Euro 600/t in Q1 2012, then creep again in 2012, before new declines in the forecast weak year of 2013. For more detail – see Pulp Price commentary on page 66.

3.1. Paper and Pulp Prices

The following tables show our quarterly price forecasts to 2015.

a) Paper Price Forecast – EUR/TON

TABLE 13. PAPER AND PULP PRICE FORECAST – € EURO						
€ EURO CURRENCY						
€ EURO	Pulp		Ground Woodline		Coated Woodline	
	€ EURO/TON	Mark	Pulp Cur-Bas (C)		Mark	Mark
1 Q 2010	475	505	495	495	715	495
2 Q 2010	740	475	750	715	740	740
3 Q 2010	755	485	755	715	810	730
4 Q 2010	440	715	760	810	810	730
1 Q 2011	475	715	760	805	810	715
2 Q 2011	480	725	765	810	815	720
3 Q 2011	475	715	760	815	815	720
4 Q 2011	410	765	760	760	765	695
1 Q 2012	490	765	760	760	765	695
2 Q 2012	410	710	765	810	810	710
3 Q 2012	495	710	805	810	815	710
4 Q 2012	495	710	805	810	815	710
1 Q 2013	430	710	760	810	810	710
2 Q 2013	540	490	765	760	760	690
3 Q 2013	530	475	765	770	775	675
4 Q 2013	530	470	765	760	765	670
2010	485	510	730	710	745	700
2011	490	715	765	810	810	710
2012	495	715	765	810	810	710
2013	540	490	765	760	760	690
2014	580	490	770	760	765	700

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EU Paper Price Forecast – UK

This table shows the UK paper price forecast.

TABLE 24. PAPER AND PULP PRICE FORECAST – UK						
UK						
QRP UK	Pulp (€t)	Unbleached Woodfibre		Coated Woodfibre		
		News	Paper Cardfibre (€t)	News	Books	
1 Q 2010	540	510	540	410	410	370
2 Q 2010	450	570	420	420	440	400
3 Q 2010	490	540	410	470	500	440
4 Q 2010	540	420	470	500	500	440
1 Q 2011	570	420	480	490	510	410
2 Q 2011	490	420	500	500	510	410
3 Q 2011	500	420	500	490	500	410
4 Q 2011	500	420	490	480	500	410
1 Q 2012	510	420	490	480	500	410
2 Q 2012	540	440	500	500	520	430
3 Q 2012	560	440	510	510	530	430
4 Q 2012	540	440	510	510	520	430
1 Q 2013	550	420	500	500	510	420
2 Q 2013	480	410	470	480	490	390
3 Q 2013	450	390	450	460	470	380
4 Q 2013	450	380	450	450	470	370
2014	500	370	420	440	470	410
2015	470	420	490	490	510	410
2016	540	440	500	500	520	430
2017	480	440	470	470	490	390
2018	480	440	460	470	490	390

Source: ECE, ECE, ECE, ECE

3.2. Exchange Rates



The paper price forecasts in this report are based on the exchange rates that are in force at the time of compiling the forecast – Euro/\$ 1.32.

Having continued to weaken in the past few months, the Euro is now back down to around the same level against the US\$ that it was a year ago, but remains below the Euro/\$ 1.32 level reached mid-2010.

The next table shows the progress of exchange rates in Europe vs. USD.

TABLE 25. EXCHANGE RATES					
	EUR/USD			EUR/USD	
1 Q 1999	1.237	1.232	1 Q 2009	1.252	1.252
2 Q 1999	1.239	1.229	2 Q 2009	1.283	1.283
3 Q 1999	1.261	1.233	3 Q 2009	1.237	1.233
4 Q 1999	1.257	1.240	4 Q 2009	1.279	1.268
1 Q 1999	1.249	1.241	1 Q 2000	1.214	1.202
2 Q 1999	1.249	1.237	2 Q 2000	1.238	1.246
3 Q 1999	1.281	1.261	3 Q 2000	1.235	1.237
4 Q 1999	1.289	1.269	4 Q 2000	1.290	1.299
1 Q 1999	1.289	1.289	1 Q 2001	1.299	1.292
2 Q 1999	1.299	1.289	2 Q 2001	1.237	1.238
3 Q 1999	1.211	1.200	3 Q 2001	1.272	1.272
4 Q 1999	1.282	1.282	4 Q 2001	1.290	1.292
1 Q 1999	1.229	1.241	1 Q 2002	1.211	1.204
2 Q 1999	1.269	1.219	2 Q 2002	1.249	1.249
3 Q 1999	1.299	1.299	3 Q 2002	1.272	1.262
4 Q 1999	1.261	1.232	4 Q 2002	1.247	1.242
1 Q 2000	0.999	1.249	1 Q 2003	1.241	1.270
2 Q 2000	0.992	1.238	2 Q 2003	1.262	1.271
3 Q 2000	0.911	1.289	3 Q 2003	1.238	1.247
4 Q 2000	0.947	1.249	4 Q 2003	1.219	1.270
1 Q 2000	0.921	1.270	1 Q 2004	1.237	1.233
2 Q 2000	0.999	1.239	2 Q 2004	1.246	1.244
3 Q 2000	0.980	1.232	3 Q 2004	1.229	1.244
4 Q 2000	0.999	1.249	4 Q 2004	1.270	1.272
1 Q 2000	0.979	1.239	1 Q 2005	1.260	1.260
2 Q 2000	0.997	1.232	2 Q 2005	1.272	1.269
3 Q 2000	0.981	1.242	3 Q 2005	1.287	1.249
4 Q 2000	0.994	1.247	4 Q 2005	1.287	1.272
1 Q 2000	1.070	1.249	1 Q 2006	1.262	1.262
2 Q 2000	1.120	1.267	2 Q 2006	1.237	1.261
3 Q 2000	1.127	1.270	3 Q 2006	1.212	1.261
4 Q 2000	1.129	1.269	4 Q 2006	1.252	1.272

(Source: ECB, last 10/11)

The price presented may result
in the value of the flow or the
cost of acquiring the financial

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6. Pulp Price & Paper Margins

6.1. Market Pulp Prices

The following tables and charts update our pulp price and paper margin analysis.

TABLE 36. PULP PRICE FORECAST				
BSP & SBSP (C&F West Europe)				
Current Prices	BSP (USD)	BSP (GBP)	BSP (EUR €)	SBSP %
1 Q 2010	850	545	675	745
2 Q 2010	745	475	590	690
3 Q 2010	755	485	605	695
4 Q 2010	715	450	560	675
1 Q 2011	725	475	575	685
2 Q 2011	740	480	590	690
3 Q 2011	745	485	605	695
4 Q 2011	805	500	625	730
1 Q 2012	815	515	635	735
2 Q 2012	820	520	640	740
3 Q 2012	820	520	640	740
4 Q 2012	870	545	680	780
1 Q 2013	880	555	690	790
2 Q 2013	740	465	580	675
3 Q 2013	710	450	560	665
4 Q 2013	740	460	580	685
Annual Averages				
2010	710	450	565	675
2011	730	475	590	685
2012	800	505	630	715
2013	750	460	580	685
2014	740	460	580	685

[Source: Eurowood, Ltd. © 2011]



As forecast, Market Pulp prices have been falling again, and our current forecast shows pulp prices falling further to US\$815/t in Q1 2012, which is lower than our previous forecast, mainly due to a stronger US dollar. We do not expect prices to fall below this level, however, due to far higher costs than during the last downturn (in 2008, when all prices fell to around US\$40/t). The subsequent upturn in 2012 is forecast to be sparked by Chinese buyers, when they realise prices have stopped falling. This is then expected to lead into the forecast improvement in paper demand around mid-2012, keeping pulp prices on an upward trend for most of the year.

All of these inter-dependent factors are then expected to take a back seat in 2013, when the whole market cycle (pulp, paper, energy, wood, the general economy) is predicted to turn down, with prices falling to US\$705/t by the end of 2013.

CHART: XYL PULP TO PAPER PRICE RATIO - EUROPE

BEP / COATED WOODFREE (Basis)

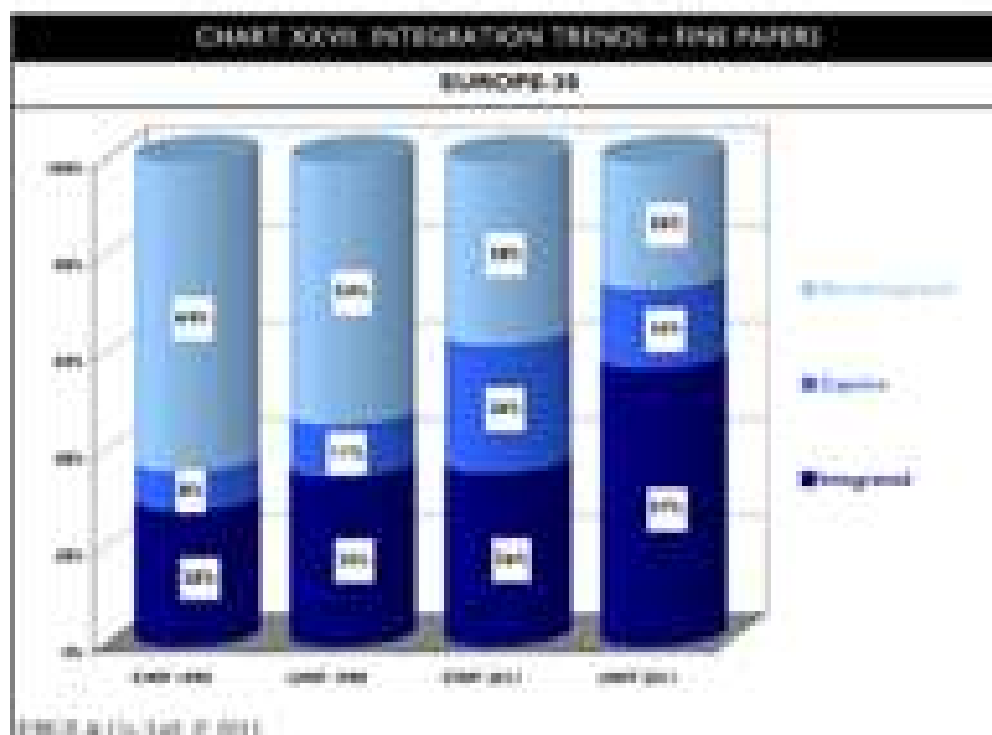


BEP / UNCOATED WOODFREE (Basis)



ENGE 2011-12-01 14:00:00

6.2. Integration



The rate of integration in the Europe-28 Woodfree sector is summarised in the chart above.

The share of non-integrated paper production has fallen from 64% in 1990 to 30% in 2011 in the **Coated Woodfree** sector, which demonstrates that, in the Coated Woodfree sector, there has been a significant switch from a heavy reliance on market pulp to much more captive pulp supplies since 1990, as well as an increase in the share of integrated production. Yet, still, only 36% of the European Coated Woodfree paper capacity is fully integrated (on-site) with chemical pulp, leaving a large proportion of the sector relatively vulnerable to fluctuations in the Open Market Pulp price.

Uncoated Woodfree mills have also had a big increase in captive pulp use, and even more of a switch to paper production based on mill-integrated pulp supply (reaching 36% of capacity in 2011). In the European Uncoated Woodfree sector only 36% of capacity is independently based on market pulp, compared to 64% in 1990. Integrated and Captive Capacity together account for 74% of European Uncoated Woodfree capacity today, which makes this sector less directly affected by movements in Market Pulp prices.

6.3. Paper-Makers' Converting Margins



The above chart compares, for integrated and non-integrated mills respectively, the Converting Margins (i.e. the difference between the price of paper and the costs of pulp) for Coated Woodfree paper producers, over the last few years.

Despite Woodfree paper prices falling since our last report, converting margins for non-integrated paper mills have actually improved slightly, because pulp prices have been falling faster. Non-integrated converting margins, despite the slight improvement, are still quite low, however, suggesting that paper prices will not fall much further unless pulp prices do the same.

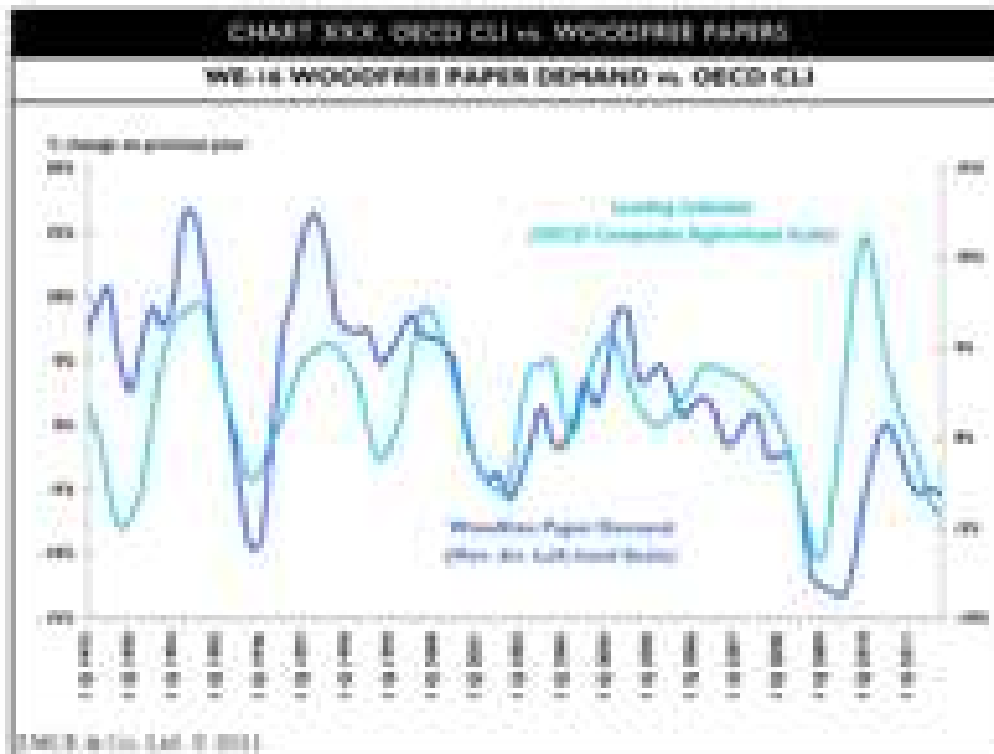


The above chart compares, for integrated and non-integrated mills respectively, the Converting Margins (i.e. the difference between the price of paper and the costs of pulp) for Uncoated Woodfree Cut-size paper producers, over recent years.

Converting margins remain low for non-integrated paper mills that purchase Market Pulp, despite a slight improvement in recent months.

However, integrated mills have gained a definite advantage over their non-integrated rivals, during the 2010-2011 period.

Appendix 1 : Market Indicators

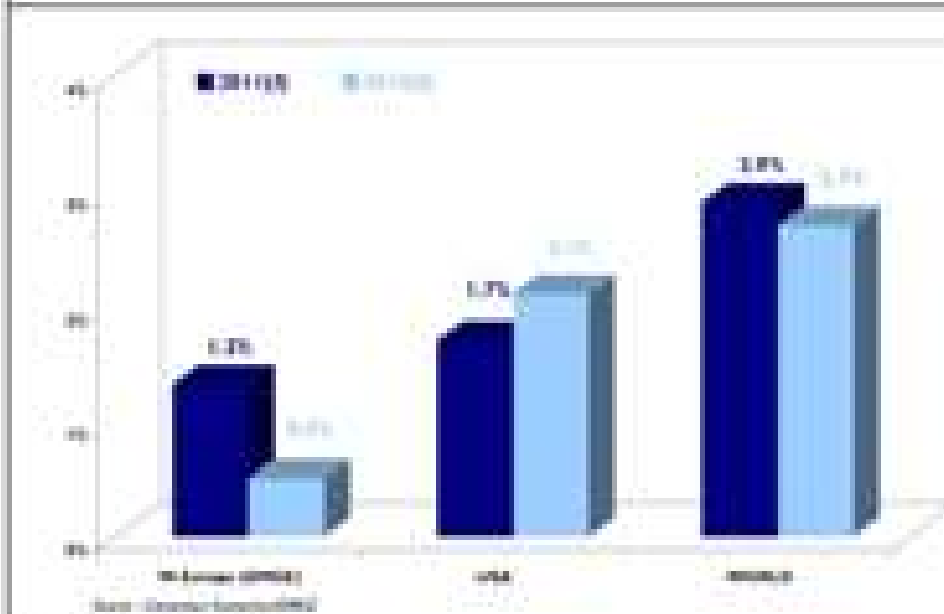


The main company (Woodfin) Agge Demand against the OECD Composite Leading Indicator. Both series a good indicator of the growth cycle.



In Europe, the OECD composite leading indicator has continued to be demand indicator and it has kept a regular recovery.

CHART XXXV. GDP CONVERGENCE FORECAST

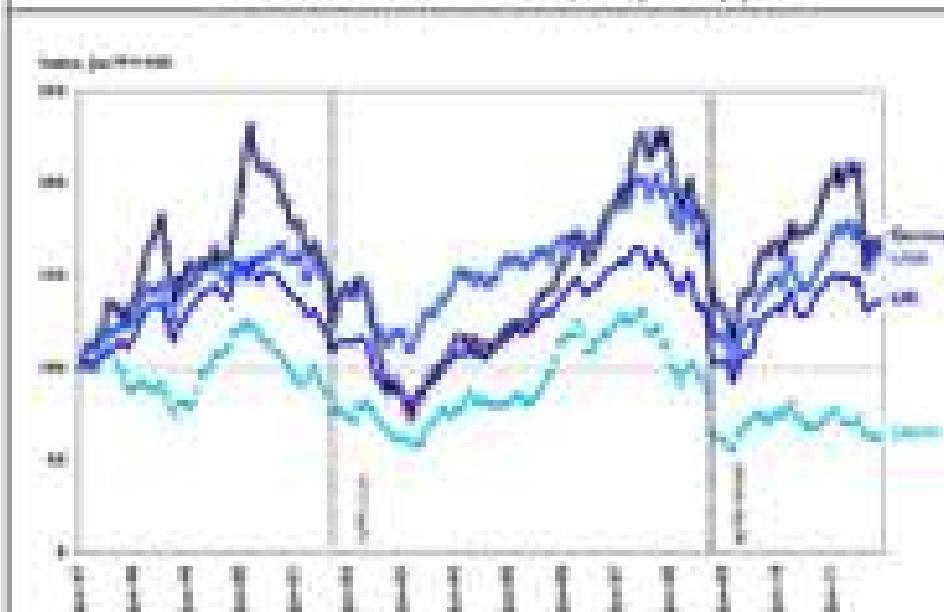


[Source: E.C. and E.U. 2011]

The European forecast for GDP over the period is generally expected to remain positive, although forecasts for 2012 have been downgraded.

CHART XXXV. SHARE PRICES

Share Price Movements - USA, Europe and Japan



[Source: E.C. and E.U. 2011]

Share prices have fluctuated and volatility over the last century due to particular the American debt crisis.

Reserve increased to nearly
 100% of the value of the
 currency fund from around
 50% before rates fell, and
 falling rates towards the low
 levels that have been
 maintained in the US and the
 UK.



Both are in line with the
 short-term interest rates
 within the previous three
 Monetary Policy

Both curves have continued to
 decline this morning, with
 the 10-year curve moving
 higher Monetary Policy



Appendix 2 : Demand Forecast Grade/Region

The tables in the Appendix show detailed forecasts for GDP and Paper Demand Trends, Paper Demand by Grade for Current and Uncovered Woodfree and Grade and regional demand predictions.

These tables supplement those in the main report.

A2.1 Trends

A2.1.1 GDP and Paper Demand, Europe-30

TABLE 10. TRENDS – GDP & PAPER DEMAND, EUROPE-30						
Europe-30						
	GDP		Coated W/Sheet		Uncoated W/Sheet	
	Index (1980=100)	Growth	Demand (2000)	Growth	Demand (2000)	Growth
1980	100	1.7%	4391	-1.0%	6762	-1.7%
1981	100	1.7%	4447	-1.0%	6861	1.5%
1982	110	1.0%	4639	-1.0%	7327	1.7%
1983	110	1.0%	4681	1.0%	7391	1.0%
1984	119	2.0%	4626	0.0%	7668	1.0%
1985	121	1.7%	4698	1.0%	8121	1.7%
1986	120	-0.8%	4779	-1.0%	8010	-1.0%
1987	127	1.7%	4884	1.0%	8044	0.2%
1988	128	1.0%	4920	1.0%	8081	0.4%
1989	130	1.5%	5204	0.5%	8463	4.0%
1990	129	-0.8%	5248	1.7%	8227	-0.7%
1991	138	3.0%	5317	1.0%	8338	0.7%
1992	142	1.5%	5521	1.0%	8221	-0.4%
1993	143	0.3%	5586	-1.7%	8447	-1.7%
1994	127	-4.0%	6131	-12.3%	8966	-12.7%
1995	128	1.0%	6488	0.0%	7948	-6.7%
1996	141	1.0%	6111	-6.0%	6711	-1.0%
1997	142	0.0%	6231	1.0%	6861	1.0%
1998	144	1.0%	6760	-1.0%	6630	-4.0%
1999	146	1.0%	6760	-0.7%	6291	-0.7%
2000	146	0.0%	6660	1.0%	6170	1.0%
Avg. 2000-10	1.0% ¹		-1.7% ²		-1.0% ³	

SOURCE: EMGE, 1st Ed. 12/2011

The above table shows the historical and forecast development of GDP and the Coated and Uncoated Woodfree paper markets for the Europe-30 region.

A.2.1.2 GDP and Paper Demand, Europe-16

TABLE 28. TRENDS - GDP & PAPER DEMAND, W. EUROPE-16						
West Europe-16						
	GDP		Coated W/Paper		Unco. W/Paper	
	Index - 1990=100	Growth	Demand ('000t)	Growth	Demand ('000t)	Growth
1992	108	0.0%	4040	-0.0%	4130	-0.0%
1993	110	1.7%	4031	11.0%	4070	0.0%
1994	111	0.9%	4023	10.1%	4051	0.1%
1995	114	2.7%	4013	7.0%	4033	0.0%
1996	119	4.4%	4073	0.0%	4100	0.0%
1997	124	0.7%	4060	0.0%	4020	0.0%
1998	124	0.7%	3990	-7.0%	3960	-0.0%
1999	127	1.0%	4003	0.0%	3980	-0.0%
2000	128	1.1%	4000	0.0%	3991	-0.1%
2001	131	0.0%	4000	0.0%	3970	-0.0%
2002	133	1.0%	4003	0.0%	3920	-0.0%
2003	137	0.0%	4000	0.0%	3920	-0.0%
2004	141	0.0%	3940	0.0%	3940	-0.0%
2005	142	0.0%	4000	-0.0%	4000	-0.0%
2006	134	-0.0%	3950	-0.0%	4070	-0.0%
2007	138	0.0%	3940	0.0%	4000	-0.0%
2008	140	0.0%	3940	-0.0%	3990	-0.0%
2009	141	0.0%	3940	0.0%	3990	-0.0%
2010	143	0.0%	3940	-0.0%	3970	-0.0%
2011	145	0.0%	3940	-0.0%	3970	-0.0%
2012	147	0.0%	3940	0.0%	3990	-0.0%
2013	149	0.0%	3940	-0.0%	3970	-0.0%
2014	149	0.0%	3940	-0.0%	3990	-0.0%
2015	149	0.0%	3940	0.0%	3990	0.0%
Aug. 2016-17	149	0.0%	3940	-0.0%	3990	-0.0%

The above table shows similar data for W.Europe-16, where the demand trend for Woodfree papers is slightly more negative than for Europe-30, as the forecast for W.Europe-16 is not boosted by the better outlook in E.Europe-14.

A3.1.3 GDP and Paper Demand, Europe 14

TABLE 29. TRENDS - GDP & PAPER DEMAND, EUROPE 14

E. Europe 14						
	GDP		Coated W/pulp		Unco. W/pulp	
	Index (1989=100)	Growth	Demand (Bbls)	Growth	Demand (Bbls)	Growth
1990	100	-0.2%	234	-0.2%	367	-0.1%
1991	101	1.2%	263	1.4%	391	0.2%
1992	101	0.0%	313	16.4%	430	1.2%
1993	102	1.2%	367	17.1%	506	-0.2%
1994	110	2.6%	391	-0.6%	618	0.2%
1995	110	0.0%	399	1.4%	709	-1.6%
1996	118	3.4%	389	-0.1%	670	-4.2%
1997	122	3.2%	429	10.2%	746	-1.4%
1998	127	4.2%	498	1.6%	796	0.6%
1999	134	5.4%	524	16.4%	790	-0.6%
2000	140	4.2%	543	1.2%	833	1.4%
2001	140	0.2%	617	13.2%	913	0.6%
2002	136	-2.7%	663	7.6%	1006	-0.2%
2003	142	3.6%	713	4.2%	967	-1.8%
2004	156	9.5%	781	10.0%	914	-1.2%
2005	167	6.2%	839	-6.6%	993	8.6%
2006	168	0.2%	846	-4.6%	946	-1.2%
2007	167	-0.6%	813	-3.4%	962	1.2%
2008	167	0.2%	810	-0.6%	973	1.0%
2009	167	0.0%	813	0.0%	989	1.2%
2010	174	3.2%	898	4.2%	1023	3.0%
Aug. 2010-11	2.7%pt		-0.6%pt		1.0%pt	

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The above table shows similar data for E. Europe 14. As mentioned earlier, the demand outlook for E. Europe 14 is more positive than for W. Europe 14.

A2.2 Grade Demand Forecasts

The following tables and charts provide our grade demand forecasts for Europe to 2015.

TABLE 26. GRADE DEMAND OUTLOOK							
Europe-26							
'000 tonnes	2010	2011	2012	2013	2014	2015	2016-15
C&P Solid	1900	1900	1900	1700	1700	1600	-0.5%
C&P Shave	4000	4000	4000	4000	3900	4000	+1.5%
UMF Solid	2100	1900	1900	1700	1700	1700	-0.5%
UMF Solid	1000	1000	1000	1000	1000	1000	-0.5%
UMF Car Case	2700	3000	3000	3000	3400	3000	+1.5%
W. Europe-18							
'000 tonnes	2010	2011	2012	2013	2014	2015	2016-15
C&P Solid	1800	1700	1800	1600	1600	1700	+1.0%
C&P Shave	4000	4000	4000	4000	3900	4000	+1.5%
UMF Solid	1800	1700	1800	1600	1600	1600	-0.5%
UMF Solid	1000	1000	1000	1000	1000	900	-0.5%
UMF Car Case	2300	3000	3000	2900	2900	3000	+1.5%
E. Europe-8							
'000 tonnes	2010	2011	2012	2013	2014	2015	2016-15
C&P Solid	100	100	100	100	100	100	+0.5%
C&P Shave	200	200	200	200	200	200	+0.5%
UMF Solid	200	200	200	200	200	200	+1.5%
UMF Solid	200	200	200	200	200	200	+1.5%
UMF Car Case	400	400	400	400	400	400	+1.5%

Source: ENGE, IFA, IFA, IF, 2011

TABLE 34. GRADE DEMAND FORECAST - CWF, EUROPE, M

Europe-28			
Year	Boards	Shaves	Total CWF
2010	1913	4330	6243
2011	1803	4119	6022
2012	1900	4110	6010
2013	1780	3900	5780
2014	1780	3940	5720
2015	1800	4000	5800
Annual growth % on			
2011	-5.7%	-5.1%	-5.4%
2012	5.5%	4.9%	5.2%
2013	-6.7%	-5.1%	-6.4%
2014	0.0%	-1.0%	-0.7%
2015	1.1%	1.5%	1.3%
2010-15 Avg	-0.8%	-0.7%	-0.7%

EMGE, LLC, July 10, 2011

TABLE 11. GRAIN DEMAND FORECAST - CNF, W. EUROPE 18

W. Europe 18			
Year	Roofs	Sheds	Total CNF
2010	1410	4000	5400
2011	1700	3800	5500
2012	1800	3800	5600
2013	1400	3700	5100
2014	1440	3400	4700
2015	1700	3300	5000
Annual growth %			
2011	2.0%	-1.7%	-0.3%
2012	1.8%	-0.4%	1.0%
2013	-2.0%	-0.3%	-0.3%
2014	-0.3%	-7.4%	-4.7%
2015	3.0%	3.0%	3.0%
2010-15 Avg	-1.0%	-0.3%	-0.6%

Source: ENGE, Ltd. W. 2011

TABLE XL. GRADE DEMAND FORECAST – CME, EUROPE, 14

EUROPE-14			
Year	Boards	Sheets	Total (CME)
2010	120	300	420
2011	100	400	500
2012	110	300	410
2013	110	400	510
2014	120	300	420
2015	130	320	450
Annual growth % in			
2011	-14.3%	3.3%	-4.0%
2012	9.1%	2.5%	3.4%
2013	0.0%	-2.0%	-4.0%
2014	9.1%	0.0%	3.3%
2015	8.3%	0.0%	4.0%
2010-15 Avg	5.4%	0.4%	0.9%

CME, 16 Dec 2011

TABLE 14. GRADE DEMAND FORECAST – LWVL, EUROPE-30

Europe-30				
'000 m ³	North	Polis	Centre	Total
2010	2110	1130	2761	6000
2011	1980	1420	2630	6030
2012	1980	1430	2630	6040
2013	1760	1130	2680	5570
2014	1750	1160	2630	5540
2015	1720	1230	2680	5630
Annual growth %/pt				
2011	-6.2%	-6.2%	-4.4%	-5.4%
2012	-6.0%	-6.4%	-4.6%	-5.7%
2013	-7.4%	-6.4%	-4.4%	-6.0%
2014	-4.1%	-3.0%	-1.9%	-4.0%
2015	1.2%	-6.0%	-1.0%	-1.8%
2010-15 Avg	-6.0%	-6.0%	-4.2%	-5.2%

(Data from ENL, ENL, E, 2011)

TABLE 3L: GRADE DEMAND FORECAST – UWF, IN EUROPE-11

Year	W. Europe-11			
	Beats	Pulle	Concre	Total
2010	1041	1247	1111	4399
2011	1050	1185	1080	4315
2012	1030	1185	1061	4276
2013	1014	1068	1060	4142
2014	1007	1000	1011	4018
2015	1007	990	1000	4000
Annual growth % pt				
2011	-0.2%	-4.8%	-1.1%	-0.6%
2012	-0.4%	-0.8%	-0.3%	-0.4%
2013	-0.2%	-10.7%	-1.4%	-2.2%
2014	-0.4%	-5.2%	1.2%	-1.4%
2015	0.4%	-1.0%	1.2%	0.8%
2010-15 Avg	-0.2%	-6.2%	-0.3%	-0.8%

Source: EMGE, 2011a, 14th Dec 2011

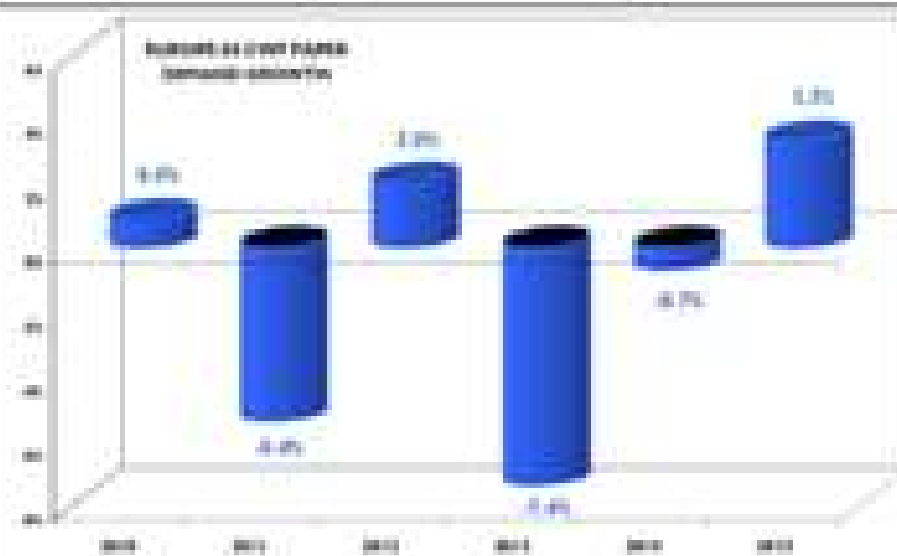
TABLE 26. GRADE DEMANDS FORECAST - UVR, E EUROPE (t)

E.Europe (t)				
Year	Soft	Hard	Others	Total
2010	270	270	400	940
2011	260	260	400	920
2012	250	240	470	960
2013	240	240	460	940
2014	240	230	430	900
2015	230	220	420	870
Annual growth %age				
2011	-4.0%	-4.1%	0.0%	-2.0%
2012	7.0%	2.1%	2.0%	2.7%
2013	-4.0%	-4.0%	2.0%	-1.0%
2014	0.0%	-2.0%	2.0%	0.7%
2015	-2.0%	-2.0%	4.0%	0.0%
2010-15 %age	-1.8%	-1.7%	2.7%	0.4%

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CHART XXXVI: COATED WOODFREE DEMAND GROWTH, EUROPE-38

Europe-38, Coated Woodfree Papers



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CHART XXXVII: UNCOATED WOODFREE DEMAND GROWTH, EUROPE-38

Europe-38, Uncoated Woodfree Papers



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CHART XL: LWF PAPER DEMAND, EUROPE-18 BY REGION

Europe-18, Uncoated Woodfree



[ENCE & FA, 2011]

CHART XL: CUT-OUT PAPER DEMAND, EUROPE-18 BY REGION

Europe-18, Uncoated Woodfree Cut-out



[ENCE & FA, 2011]

CHART 33E. UWF REEL PAPER DEMAND, EUROPE-35 BY REGION



CHART 33F. UWF FOLD SHEETS PAPER DEMAND, EUROPE-35 BY REGION



CHART XLV. COATED WOODFIBRE PAPER DEMAND, EUROPE-33 BY REGION

Europe-33, Coated Woodfibre



(Note: A full table is available in the appendix.)

CHART XLV. OAT SHEETS PAPER DEMAND, EUROPE-33 BY REGION

Europe-33, Coated Woodfibre Sheets



(Note: A full table is available in the appendix.)



A2.3 Grade Demand Forecasts, by region

A2.3.1 Grade Demand Forecasts, by region – Central Woodfire

TABLE 37. DEMAND FORECAST – CWF SHEETS						
Europe-30						
'000 t	Germany	France	UK	Italy	Russ	Europe-30
2010	1120	600	0.0	0.0	110	4830
2011	1180	600	0.0	0.0	110	4910
2012	1190	600	0.0	0.0	110	4900
2013	1110	600	0.0	0.0	110	4820
2014	1080	600	0.0	0.0	110	4790
2015	1100	600	0.0	0.0	110	4810
'000 t	Norw	Sweden	Scots	Den/WG	EE-14	Europe-30
2010	170	0.0	0.0	270	0.0	440
2011	160	0.0	0.0	260	0.0	420
2012	170	0.0	0.0	260	0.0	430
2013	160	0.0	0.0	250	0.0	410
2014	160	0.0	0.0	250	0.0	410
2015	160	0.0	0.0	260	0.0	420
Growth %p	Germany	France	UK	Italy	Russ	Europe-30
2011	+5.3%	+0.0%	+0.0%	+0.0%	+0.0%	+1.7%
2012	+5.1%	+0.0%	+0.0%	+0.0%	+0.0%	+1.6%
2013	+6.7%	+0.0%	+0.0%	+0.0%	+0.0%	+3.4%
2014	+1.7%	+0.0%	+0.0%	+0.0%	+0.0%	+0.4%
2015	+1.7%	+0.0%	+0.0%	+0.0%	+0.0%	+0.4%
2010-15 Avg	+3.3%	+0.0%	+0.0%	+0.0%	+0.0%	+1.2%
Growth %p	Norw	Sweden	Scots	Den/WG	EE-14	Europe-30
2011	-5.9%	+0.0%	+0.0%	-3.7%	+0.0%	-3.2%
2012	+5.9%	+0.0%	+0.0%	+3.7%	+0.0%	+3.2%
2013	+6.0%	+0.0%	+0.0%	+3.7%	+0.0%	+3.4%
2014	+6.3%	+0.0%	+0.0%	+3.7%	+0.0%	+3.6%
2015	+6.3%	+0.0%	+0.0%	+3.7%	+0.0%	+3.6%
2010-15 Avg	+0.4%	+0.0%	+0.0%	+0.0%	+0.0%	+0.1%

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TABLE 36. DEMAND FORECAST – CWP RULE

Europe-20						
Year	Germany	France	UK	Italy	Russ	Europe-20
2010	380	283	343	140	130	1433
2011	400	300	333	120	400	1623
2012	380	280	330	140	110	1430
2013	400	300	340	110	400	1750
2014	440	300	440	110	400	1790
2015	490	300	440	110	110	1450
Year	Germany	France	UK	Italy	Russ	Europe-20
2010	30	132	132	60	120	1932
2011	30	133	130	60	100	1823
2012	30	130	130	100	110	1930
2013	30	110	111	60	110	1791
2014	30	110	111	60	120	1791
2015	30	110	130	60	120	1932
Growth Type	Germany	France	UK	Italy	Russ	Europe-20
2011	-2.0%	-2.0%	-2.0%	-6.0%	-2.0%	-2.0%
2012	2.0%	0.0%	0.0%	-6.0%	-6.0%	0.0%
2013	-4.0%	-2.0%	-2.0%	-10.0%	-6.0%	-7.0%
2014	0.0%	-2.0%	0.0%	0.0%	1.0%	-0.0%
2015	2.0%	2.0%	-6.0%	-6.0%	1.0%	0.0%
2016-15 Type	-6.0%	-2.0%	-6.0%	-6.0%	-2.0%	-6.0%
Growth Type	Germany	France	UK	Italy	Russ	Europe-20
2011	0.0%	-6.0%	-11.0%	-6.0%	-12.0%	-6.0%
2012	0.0%	-6.0%	0.0%	0.0%	0.0%	0.0%
2013	0.0%	-6.0%	-11.0%	-10.0%	0.0%	-7.0%
2014	0.0%	0.0%	0.0%	0.0%	-2.0%	0.0%
2015	0.0%	-6.0%	-6.0%	0.0%	0.0%	0.0%
2016-15 Type	0.0%	-7.0%	-6.0%	-6.0%	1.0%	-6.0%

EMGE, 26/11/2011, 14h 37' (2011)

TABLE 16. DEMAND FORECAST - CWP 1-10M

Europe-20						
'000 t	Germany	France	UK	Italy	Russ	Europe-20
2010	1123	761	841	830	1170	4625
2011	1060	750	850	740	1110	4410
2012	1100	760	873	753	1160	4546
2013	1090	680	793	680	1040	4383
2014	1080	670	773	670	1040	4300
2015	1020	670	810	700	1110	4310
'000 t	Norwie	Sweden	Norw	Den/WG	EE-14	Europe-20
2010	123	400	241	400	420	1584
2011	113	400	260	375	390	1538
2012	120	400	210	360	413	1503
2013	100	400	403	340	410	1753
2014	100	400	400	340	400	1740
2015	100	400	403	333	400	1736
Growth %p	Germany	France	UK	Italy	Russ	Europe-20
2011	-5.6%	-1.4%	1.9%	-12.6%	-5.1%	-4.4%
2012	1.9%	1.3%	1.9%	1.6%	5.5%	1.8%
2013	-0.9%	-0.7%	-10.3%	-9.7%	-4.3%	-7.4%
2014	-0.9%	-0.7%	-1.3%	-1.3%	0.0%	-0.7%
2015	1.5%	1.5%	4.2%	4.7%	1.2%	3.0%
2010-15 Avg	-4.2%	-1.0%	-4.4%	-8.3%	-4.3%	-4.3%
Growth %p	Norwie	Sweden	Norw	Den/WG	EE-14	Europe-20
2011	-8.1%	-0.3%	-8.3%	-6.3%	-6.0%	-6.4%
2012	1.6%	0.0%	1.6%	1.3%	0.4%	1.0%
2013	-16.3%	-0.3%	-16.6%	-9.3%	0.0%	-7.4%
2014	-0.4%	-0.2%	-1.3%	0.0%	2.3%	-0.7%
2015	1.5%	2.4%	1.3%	2.9%	0.0%	1.6%
2010-15 Avg	-4.8%	-0.3%	-8.3%	-4.3%	0.9%	-4.3%

Source: ENGE, Ltd. © 2011

A2.3.2 Grate Demand Forecasts, by region – Uncoated Woodfire

TABLE 40. DEMAND FORECAST – UNF FUEL

Europe-20						
Year	Germany	France	UK	Italy	Russ.	Europe-20
2010	205	210	225	112	200	2710
2011	200	205	220	100	210	2680
2012	195	200	215	100	210	2640
2013	190	200	210	100	210	2600
2014	190	200	210	100	210	2600
2015	190	200	210	100	210	2600
Year	Norfolk	Southwest	North	East/West	EE-14	Europe-20
2010	110	120	100	100	270	2710
2011	100	120	110	110	260	2680
2012	90	110	100	110	250	2640
2013	90	110	100	100	250	2600
2014	90	110	100	100	250	2600
2015	90	110	100	100	250	2600
Growth %p	Germany	France	UK	Italy	Russ.	Europe-20
2011	-2.4%	-2.4%	-2.2%	-8.7%	-5.2%	-6.2%
2012	-2.4%	-2.4%	-2.2%	-7.7%	-3.2%	-6.2%
2013	-2.4%	-2.4%	-2.2%	-10.0%	-3.2%	-5.7%
2014	-2.4%	-2.2%	-4.7%	-9.7%	-3.4%	-5.4%
2015	-2.4%	-2.4%	-2.2%	-9.7%	-2.2%	-5.4%
2016-15 Avg	-2.2%	-2.3%	-4.7%	-8.2%	-3.2%	-5.4%
Growth %p	Norfolk	Southwest	North	East/West	EE-14	Europe-20
2011	-9.1%	-8.3%	-1.0%	-9.7%	-7.2%	-6.2%
2012	-10.0%	-8.3%	-1.7%	-9.7%	-3.8%	-6.2%
2013	-11.1%	-8.3%	-9.1%	-9.7%	-2.0%	-5.7%
2014	-9.7%	-8.3%	-9.7%	-9.7%	0.0%	-5.4%
2015	-9.7%	-8.3%	-9.7%	-9.7%	2.0%	-5.4%
2016-15 Avg	-10.4%	-8.4%	-4.2%	-9.4%	-3.0%	-5.4%

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TABLE 41. DEMAND FORECAST - UNF FOLD

Europe-M						
'000 t	Germany	France	UK	Italy	Russ	Europe
2010	280	170	222	220	490	1380
2011	270	170	210	220	470	1400
2012	270	170	210	220	460	1400
2013	260	160	190	220	380	1300
2014	240	140	170	220	370	1200
2015	240	140	170	220	370	1200
'000 t	Norway	Sweden	Norw	Denmark	Finland	Europe-M
2010	60	100	122	100	270	650
2011	60	100	120	100	260	640
2012	60	100	120	100	260	640
2013	60	100	100	90	240	590
2014	60	100	100	90	230	580
2015	60	90	100	90	210	550
Growth Type	Germany	France	UK	Italy	Russ	Europe-M
2011	-3.5%	0.0%	-5.4%	0.0%	-1.0%	-3.2%
2012	0.0%	0.0%	0.0%	0.0%	-1.4%	0.0%
2013	-3.6%	-1.0%	-1.7%	-1.7%	-6.4%	-6.0%
2014	-1.0%	-1.0%	-1.4%	-1.7%	-1.0%	-1.7%
2015	-1.0%	-1.0%	-1.4%	0.0%	0.0%	-1.2%
2010-15 Avg	-4.0%	-0.8%	-3.0%	-1.7%	-3.0%	-4.0%
Growth Type	Norway	Sweden	Norw	Denmark	Finland	Europe-M
2011	-10.0%	-10.0%	-11.1%	-4.0%	-11.1%	-9.2%
2012	0.0%	0.0%	0.0%	0.0%	2.1%	0.0%
2013	-11.1%	-6.7%	-11.1%	-10.0%	0.0%	-8.0%
2014	-11.1%	-4.0%	-4.0%	-1.0%	0.0%	-4.0%
2015	0.0%	-1.0%	0.0%	0.0%	0.0%	-1.2%
2010-15 Avg	-6.0%	-4.0%	-6.0%	-4.1%	-1.7%	-6.0%

[Source: ENGE, based on 2011]

TABLE 41. DEMAND FORECAST - LHW CUTSIZE

Europe-20						
Year	Germany	France	UK	Italy	Russ	Europe-20
2010	410	390	340	310	1210	2060
2011	380	360	310	300	1400	2050
2012	370	360	310	300	1300	2040
2013	330	330	300	340	1400	2000
2014	330	340	400	310	1400	2080
2015	340	340	400	310	1310	2000
Year	Norfolk	Northair	Norcia	Col/WG	EE 14	Europe-20
2010	130	300	110	140	400	1080
2011	130	300	100	140	400	1070
2012	130	300	110	140	410	1090
2013	140	330	130	130	400	1130
2014	140	340	140	120	390	1130
2015	130	340	140	120	390	1120
Growth Type	Germany	France	UK	Italy	Russ	Europe-20
2011	-0.7%	-0.6%	-0.6%	-0.3%	-0.3%	-0.4%
2012	-0.8%	-0.6%	-0.6%	-0.3%	-0.3%	-0.4%
2013	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%	-0.3%
2014	0.0%	0.0%	0.1%	0.0%	0.1%	0.0%
2015	1.0%	0.0%	1.0%	0.0%	0.0%	0.7%
2016-17 Type	-0.0%	-0.3%	-0.7%	-0.0%	-0.0%	-0.1%
Growth Type	Norfolk	Northair	Norcia	Col/WG	EE 14	Europe-20
2011	0.0%	1.7%	-0.7%	0.1%	0.0%	-0.0%
2012	0.0%	0.0%	-0.0%	0.0%	0.0%	-0.0%
2013	-0.3%	0.0%	-0.3%	-0.3%	0.0%	-0.0%
2014	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016-17 Type	-0.0%	-0.0%	-0.7%	-0.0%	0.0%	-0.1%

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TABLE 43: DEMAND FORECAST – LVL® PAPER1

Europe-30						
'000 m	Germany	France	UK	Italy	Russ	Europe-30
2010	1212	1120	1090	743	3530	7695
2011	1230	1080	1040	750	3560	8060
2012	1212	1070	962	750	3610	8004
2013	1180	1060	897	650	3720	8007
2014	1160	990	890	663	3710	8013
2015	1160	990	890	670	3760	8070
'000 m	Norway	Sweden	Spain	Denmark	Poland	Europe-30
2010	213	400	623	663	990	2909
2011	200	390	573	660	990	2813
2012	200	390	560	660	990	2800
2013	200	390	510	623	970	2793
2014	200	390	500	620	990	2799
2015	200	390	510	623	1020	2843
Growth Type	Germany	France	UK	Italy	Russ	Europe-30
2011	+1.5%	+0.9%	-4.6%	+0.9%	+0.9%	+0.4%
2012	+1.5%	+0.9%	-4.6%	+0.9%	+0.9%	+0.4%
2013	+1.5%	+0.9%	-4.6%	+0.9%	+0.9%	+0.4%
2014	+0.7%	+0.9%	-4.1%	+0.7%	+0.9%	+0.3%
2015	+0.7%	+0.9%	-4.0%	+0.9%	+0.9%	+0.3%
2016-18 Type	+0.0%	+0.0%	-4.0%	+0.0%	+0.9%	+0.0%
Growth Type	Norway	Sweden	Spain	Denmark	Poland	Europe-30
2011	+0.0%	+0.0%	+0.0%	+1.1%	+0.0%	+0.0%
2012	+0.0%	+0.0%	+0.0%	+0.0%	+0.0%	+0.0%
2013	+0.0%	+0.0%	+0.0%	+0.0%	+0.0%	+0.0%
2014	+0.0%	+0.0%	+0.0%	+1.2%	+0.0%	+0.0%
2015	+0.0%	+0.0%	+0.0%	+1.2%	+0.0%	+0.0%
2016-18 Type	+0.0%	+0.0%	+0.0%	+0.0%	+0.0%	+0.0%

[Source: ENIG, Eurostat, ECE 2011]

A2.4 Woodfire Grade Demand Forecasts by country/region

(including Offshore Imports)

TABLE 44. DEMAND FORECAST – GERMANY							
Germany							
Year	Stems	Roofs	CWP	Roofs	Falls	Carpets	UWP
2010	1020	300	1110	100	200	610	1010
2011	1062	400	1460	160	270	690	1230
2012	1094	300	1390	170	270	710	1210
2013	1110	300	1400	160	260	690	1190
2014	1100	400	1500	160	260	690	1190
2015	1130	400	1530	160	260	690	1190
Annual growth % p.a.							
2011	4.0%	33%	31%	60%	35%	11%	20%
2012	3.0%	33%	23%	60%	35%	3%	18%
2013	1.5%	0%	0.7%	6.3%	3.7%	2.9%	1.6%
2014	-0.9%	33%	6.9%	6.3%	3.8%	0.1%	0.0%
2015	2.7%	0.0%	2.0%	6.3%	3.8%	1.4%	0.0%
2016-18 Avg	-0.2%	-0.4%	-1.2%	-0.2%	-0.4%	-0.2%	-0.4%

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TABLE 4L. DEMAND FORECAST – FRANCE

France							
'000 t	Stems	Boards	CWP	Boards	Pallets	Cordons	CWP
2010	660	260	740	230	170	600	1720
2011	660	260	730	230	170	600	1680
2012	660	260	740	240	170	600	1670
2013	670	260	680	210	160	610	1600
2014	670	250	670	200	160	610	600
2015	670	260	690	210	160	610	600
Annual growth %pts							
2011	-1.5%	-1.9%	-4.4%	-4.3%	0.0%	-1.6%	-3.5%
2012	0.0%	1.5%	3.3%	-4.3%	0.0%	0.0%	-1.4%
2013	-4.5%	-1.5%	-6.5%	-14.3%	-11.8%	-4.0%	-6.3%
2014	0.0%	-1.0%	-6.5%	-12.5%	-3.0%	0.0%	-1.0%
2015	1.5%	1.0%	3.0%	1.0%	-6.0%	0.0%	0.0%
2010-15 Avg	-0.2%	-0.4%	-1.4%	-6.3%	-6.0%	-1.2%	-3.2%

(Source: ENF, Ltd. © 2011)

TABLE 4L. DEMAND FORECAST – UK

UK							
'000 t	Stems	Boards	CWP	Boards	Pallets	Cordons	CWP
2010	100	300	800	220	220	500	1000
2011	900	300	800	200	210	510	1010
2012	900	300	810	200	210	510	990
2013	900	310	780	210	190	500	900
2014	910	310	770	220	170	490	890
2015	910	300	810	210	170	490	890
Annual growth %pts							
2011	-4.0%	-1.5%	-4.0%	-11.0%	-4.5%	-4.0%	-3.0%
2012	0.0%	1.0%	1.0%	-7.0%	-0.0%	-1.0%	-1.0%
2013	-11.1%	3.3%	-3.8%	-11.0%	-11.0%	-2.0%	-8.0%
2014	1.0%	0.0%	-4.0%	-4.0%	-6.0%	1.0%	-1.0%
2015	1.0%	1.0%	4.0%	1.0%	-2.0%	1.0%	0.0%
2010-15 Avg	-0.2%	-0.3%	-1.0%	-6.7%	-6.2%	-1.2%	-3.4%

(Source: ENF, Ltd. © 2011)

TABLE 47. DEMAND FORECAST – ITALY

Italy							
Year	Boards	Roofs	CWP	Roofs	Falls	Columns	UWFF
2010	380	140	300	110	100	240	500
2011	390	130	300	100	100	240	500
2012	390	140	300	100	100	240	500
2013	380	130	300	100	100	240	500
2014	400	130	300	100	100	250	540
2015	400	130	300	100	100	250	550
Annual growth % p.a.							
2011	+2.6%	-6.7%	+0.0%	-9.1%	0.0%	+0.0%	+0.0%
2012	0.0%	-6.7%	0.0%	-9.1%	0.0%	+0.0%	+0.0%
2013	-0.3%	-6.7%	-0.0%	-9.1%	-0.0%	+0.0%	+0.0%
2014	+5.3%	0.0%	+0.0%	-0.0%	-0.0%	+4.2%	+8.0%
2015	+0.0%	-0.0%	-0.0%	-0.0%	0.0%	+0.0%	0.0%
2016-17 Avg	-0.3%	-0.7%	-0.0%	-0.0%	-0.0%	+0.0%	+0.0%

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TABLE 48. DEMAND FORECAST – NORDIC

Nordic							
Year	Boards	Roofs	CWP	Roofs	Falls	Columns	UWFF
2010	100	50	100	100	50	100	200
2011	100	50	110	100	50	100	200
2012	100	50	100	50	50	100	200
2013	100	50	100	50	50	140	240
2014	100	50	100	50	50	140	240
2015	100	50	100	50	50	140	240
Annual growth % p.a.							
2011	0.0%	0.0%	+9.1%	0.0%	+0.0%	0.0%	+0.0%
2012	0.0%	0.0%	0.0%	-50.0%	0.0%	0.0%	+0.0%
2013	0.0%	0.0%	-0.0%	-50.0%	+0.0%	+40.0%	+20.0%
2014	0.0%	0.0%	-0.0%	-0.0%	+0.0%	0.0%	+0.0%
2015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016-17 Avg	-0.0%	0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%

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TABLE 49. DEMAND FORECAST - MINELUX

Minelux							
'000 t	Stems	Boards	CWP	Boards	Falls	Cores	CWP
2010	100	111	400	111	110	100	400
2011	100	111	400	110	110	100	399
2012	100	110	400	111	111	100	399
2013	100	110	400	110	100	100	398
2014	100	110	410	100	100	100	397
2015	100	111	400	100	90	100	397
Actual growth %/yr							
2011	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%
2012	0.0%	0.0%	0.0%	-0.0%	0.0%	0.0%	0.0%
2013	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%
2014	-0.0%	0.0%	-0.0%	-0.0%	-0.0%	0.0%	-0.0%
2015	0.0%	0.0%	0.0%	0.0%	-0.0%	0.0%	0.0%
2016-15 Avg	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%

(Source: ENCI, Jan. 9, 2012)

TABLE 50. DEMAND FORECAST - BIERA

Biera							
'000 t	Stems	Boards	CWP	Boards	Falls	Cores	CWP
2010	110	111	500	100	110	110	400
2011	100	110	500	110	110	100	399
2012	100	110	500	100	110	110	399
2013	100	111	400	100	100	100	398
2014	100	111	400	100	100	100	398
2015	100	110	400	100	100	100	397
Actual growth %/yr							
2011	-0.0%	-0.0%	-0.0%	0.0%	0.0%	-0.0%	-0.0%
2012	0.0%	0.0%	0.0%	-0.0%	0.0%	0.0%	-0.0%
2013	-0.0%	-0.0%	-0.0%	-0.0%	0.0%	0.0%	-0.0%
2014	-0.0%	0.0%	-0.0%	-0.0%	0.0%	0.0%	-0.0%
2015	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
2016-15 Avg	-0.0%	-0.0%	-0.0%	-0.0%	0.0%	-0.0%	-0.0%

(Source: ENCI, Jan. 9, 2012)

TABLE 11: DEMAND FORECAST – OTHER W EUROPE

Other W.E. Countries (Austria, Swiss, Denmark & Ireland)							
Year	Stems	Resin	CWP	Resin	Fibre	Conifer	CWP
2010	291	100	400	130	100	200	440
2011	280	95	370	110	100	240	440
2012	280	100	380	110	100	240	430
2013	231	90	340	100	90	230	420
2014	231	90	340	100	90	230	420
2015	200	85	300	100	85	210	400
Annual growth % p.a.							
2011	-3.7%	-4.0%	-7.5%	-15.0%	-0.0%	20.0%	-0.2%
2012	0.0%	5.3%	3.0%	-18.2%	0.0%	-16.7%	-0.2%
2013	-17.6%	-10.0%	-8.1%	-9.1%	-10.0%	-4.2%	-5.4%
2014	0.0%	0.0%	0.0%	-0.0%	-1.1%	4.3%	-1.2%
2015	-13.0%	-5.6%	-1.8%	0.0%	0.0%	-8.3%	-4.8%
2010-15 Avg	-8.3%	-4.8%	-4.8%	-8.4%	-4.7%	-6.4%	-4.8%

CWP & F, % Jan. 0, 2011

TABLE 12: DEMAND FORECAST – W EUROPE-16

W Europe-16							
Year	Stems	Resin	CWP	Resin	Fibre	Conifer	CWP
2010	1000	1015	3440	1040	1200	2240	3800
2011	980	1110	3540	1120	1100	2640	3900
2012	980	1000	3440	1400	1100	2640	3900
2013	910	1070	3400	1310	1000	2900	3870
2014	900	1040	3100	1300	1000	2910	3800
2015	860	1120	3300	1400	900	2900	3400
Annual growth % p.a.							
2011	-1.7%	9.3%	2.9%	6.7%	-8.3%	17.9%	2.6%
2012	0.0%	-9.9%	2.8%	22.2%	0.0%	0.0%	-1.6%
2013	-7.1%	7.2%	-0.6%	9.7%	-10.0%	0.4%	-1.2%
2014	-1.1%	-2.8%	-8.8%	-0.7%	-0.0%	1.2%	-1.6%
2015	-4.4%	7.7%	6.2%	7.7%	-10.0%	1.0%	-14.7%
2010-15 Avg	-4.3%	4.0%	-0.8%	6.8%	-4.7%	6.7%	-1.8%

CWP & F, % Jan. 0, 2011

TABLE 13. DEMAND FORECAST – EUROPE-14

Europe-14							
Year	Stone	Brick	CWP	Brick	Patio	Ceramic	CWP
2010	100	120	420	170	170	400	660
2011	990	100	390	140	140	400	640
2012	980	110	410	130	140	470	660
2013	990	110	410	140	140	480	670
2014	990	100	420	140	130	500	690
2015	100	120	430	150	130	520	700
Annual growth % per							
2011	-0.1%	-1.7%	-6.9%	-1.8%	-11.8%	0.0%	-0.3%
2012	1.0%	8.3%	5.1%	1.8%	7.1%	1.8%	3.0%
2013	-1.0%	0.0%	-4.9%	-1.0%	0.0%	1.0%	1.5%
2014	1.0%	0.0%	2.4%	0.0%	2.0%	1.0%	1.5%
2015	1.0%	0.0%	4.0%	1.0%	0.0%	4.0%	3.0%
2016-17 Avg	0.0%	1.0%	0.0%	-0.2%	-0.2%	1.0%	0.0%

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TABLE 14. DEMAND FORECAST – EUROPE-20

Europe-20							
Year	Stone	Brick	CWP	Brick	Patio	Ceramic	CWP
2010	1000	1000	4000	1100	1100	1700	7800
2011	9900	1000	4100	1070	1400	1600	6900
2012	9900	1000	4200	1080	1400	1600	6900
2013	9900	1000	4200	1080	1400	1600	6900
2014	9900	1000	4200	1080	1320	1600	6900
2015	9900	1000	4200	1080	1340	1600	6970
Annual growth % per							
2011	-0.1%	-1.7%	-6.0%	-2.7%	0.0%	-6.0%	-9.0%
2012	0.0%	0.0%	2.4%	0.0%	0.0%	0.0%	-0.0%
2013	-0.0%	-0.0%	-2.4%	-0.0%	0.0%	-0.0%	-0.0%
2014	-0.0%	0.0%	-6.0%	-0.0%	-5.9%	0.0%	-0.0%
2015	0.0%	0.0%	0.0%	0.0%	-0.0%	0.0%	0.0%
2016-17 Avg	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%	-0.0%

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Appendix 3 : Quarterly Forecasts

3.1.1 Market Forecast – Quarterly – Central Windfarm

Here, we summarise the following quarterly market forecast for Central Windfarm (Trent), followed by Beeth and Urquy in Europe-M, W Europe-UK and E Europe-IT.

a) Central Windfarm Market (Quarterly Forecast, EEMEA-UK)

TABLE 11. CWF (3-400) : QUARTERLY MARKET, EUROPE-UK						
Europe-UK						
Year		Demand	Imports	Exports	Deliveries	Capacity
2010	Q1	1700	170	000	1530	1200
	Q2	1800	80	000	1720	1200
	Q3	1800	80	000	1720	1200
	Q4	1700	80	000	1620	1200
	Total 2010	6900	330	000	6570	4800
2011	Q1	1800	80	000	1720	1200
	Q2	1800	80	000	1720	1200
	Q3	1800	80	000	1720	1200
	Q4	1700	80	000	1620	1200
	Total 2011	7100	320	000	6740	4800
2012	Q1	1800	80	000	1720	1200
	Q2	1800	80	000	1720	1200
	Q3	1800	80	000	1720	1200
	Q4	1700	80	000	1620	1200
	Total 2012	7100	320	000	6740	4800
2013	Q1	1800	80	000	1720	1200
	Q2	1800	80	000	1720	1200
	Q3	1800	80	000	1720	1200
	Q4	1700	80	000	1620	1200
	Total 2013	7100	320	000	6740	4800
2014		1700	100	1000	800	800
2015		1700	100	1000	800	800
2016-2020		1.7%	1.7%	1.7%	1.7%	1.7%

(Full Exports include all other deliveries outside Europe-UK)

TABLE 16: EAT (3 mos) - QUARTERLY RESULTS, IN EUROPS 14

EU Europe 14						
Units	Revenue	Inputs	Expenses	Deliveries	Capacity	Op. Rate
2010 Q1	1000	100	100	1000	1000	100%
2010 Q2	1000	100	100	1000	1000	100%
2010 Q3	1000	100	100	1000	1000	100%
2010 Q4	1000	100	100	1000	1000	100%
Total 2010	4000	400	400	4000	4000	100%
2011 Q1	1100	110	110	1100	1100	100%
2011 Q2	1100	110	110	1100	1100	100%
2011 Q3	1100	110	110	1100	1100	100%
2011 Q4	1100	110	110	1100	1100	100%
Total 2011	4400	440	440	4400	4400	100%
2012 Q1	1200	120	120	1200	1200	100%
2012 Q2	1200	120	120	1200	1200	100%
2012 Q3	1200	120	120	1200	1200	100%
2012 Q4	1200	120	120	1200	1200	100%
Total 2012	4800	480	480	4800	4800	100%
2013 Q1	1300	130	130	1300	1300	100%
2013 Q2	1300	130	130	1300	1300	100%
2013 Q3	1300	130	130	1300	1300	100%
2013 Q4	1300	130	130	1300	1300	100%
Total 2013	5200	520	520	5200	5200	100%
2014	5100	510	510	5100	5100	98%
2015	5000	500	500	5000	5000	99%
2016-17 Avg	4.8%	4.8%	4.8%	4.8%	4.8%	

Source: EAT, 1st Jan. 2017

(14) Exports include all deliveries outside EU Europe 14, including those to EU Europe 14.

to CMT Needs of Basic Demand (Quarterly Forecast)

TABLE 17. CMT NEEDS & SHEETS (2-Use) - Q1 DEMAND, EUROPE (M)						
Europe (M)						
Year		GDP (M)	Stores	Books	Target CMT	Sheet (M)
2010	Q1	0.7%	110	100	100	0
	Q2	0.7%	110	100	100	0
	Q3	1.2%	110	100	100	0
	Q4	0.7%	100	100	100	0
	Total (M)	0.7%	430	400	400	0
2011	Q1	1.0%	110	100	100	0
	Q2	1.0%	100	100	100	0
	Q3	1.0%	100	100	100	0
	Q4	0.9%	100	100	100	0
	Total (M)	1.0%	410	400	400	0
2012	Q1	1.0%	110	100	100	0
	Q2	0.9%	110	100	100	0
	Q3	0.9%	100	100	100	0
	Q4	1.2%	100	100	100	0
	Total (M)	0.9%	420	400	400	0
2013	Q1	0.9%	100	100	100	0
	Q2	1.2%	100	100	100	0
	Q3	1.0%	100	100	100	0
	Q4	1.2%	100	100	100	0
	Total (M)	1.2%	400	400	400	0
2014		1.0%	300	100	300	0
2015		0.9%	300	100	300	0
Grand Total		1.0%	1,470	1,400	1,400	0

(Source: ENGE, Book, 2011)

TABLE 06: CWP RESOL & MONTHS (1-4-11) - BY DEMAND, BY REGION (1)						
All Demands (1)						
Year	CWP type	Income	Expend	Total CWP	Growth %	
2010	Q1	0.0%	1000	0.0	1000	0%
	Q2	0.0%	1000	0.0	1000	0%
	Q3	0.0%	1000	0.0	1000	0%
	Q4	0.0%	1000	0.0	1000	0%
	Total 2010	0.0%	4000	0.0	4000	0%
2011	Q1	0.0%	1000	0.0	1000	0%
	Q2	0.0%	1000	0.0	1000	0%
	Q3	0.0%	1000	0.0	1000	0%
	Q4	0.0%	1000	0.0	1000	0%
	Total 2011	0.0%	4000	0.0	4000	0%
2012	Q1	0.0%	1000	0.0	1000	0%
	Q2	0.0%	1000	0.0	1000	0%
	Q3	0.0%	1000	0.0	1000	0%
	Q4	0.0%	1000	0.0	1000	0%
	Total 2012	0.0%	4000	0.0	4000	0%
2013	Q1	0.0%	1000	0.0	1000	0%
	Q2	0.0%	1000	0.0	1000	0%
	Q3	0.0%	1000	0.0	1000	0%
	Q4	0.0%	1000	0.0	1000	0%
	Total 2013	0.0%	4000	0.0	4000	0%
2010-2013		0.0%	16000	0.0	16000	0%
2014		0.0%	1000	0.0	1000	0%
2015		0.0%	1000	0.0	1000	0%
2016-2019		0.0%	0.0%	0.0%	0.0%	0%

Source: 1st Quarter 2011

B. Strategies -14						
Year	ESOP Type	Share	Cost	Total Cost	Share %	
2010	Q1	0.0%	100	0	100	0%
	Q2	0.0%	100	0	100	0%
	Q3	0.0%	110	0	110	0%
	Q4	0.0%	120	0	120	0%
	Total (2010)	0.0%	430	0	430	0%
2011	Q1	1.0%	100	0	100	1%
	Q2	0.0%	110	0	110	0%
	Q3	0.0%	120	0	120	0%
	Q4	0.0%	130	0	130	0%
	Total (2011)	0.0%	460	0	460	0%
2012	Q1	1.0%	100	0	100	1%
	Q2	1.0%	100	0	100	1%
	Q3	1.0%	110	0	110	1%
	Q4	0.0%	120	0	120	0%
	Total (2012)	0.0%	430	0	430	0%
2013	Q1	1.0%	100	0	100	1%
	Q2	1.0%	100	0	100	1%
	Q3	1.0%	110	0	110	1%
	Q4	0.0%	120	0	120	0%
	Total (2013)	0.0%	430	0	430	0%
2014	Q1	2.0%	0	120	120	2%
	Q2	0.0%	0	120	120	0%
	Q3	0.0%	0	120	120	0%
	Q4	0.0%	0	120	120	0%
	Total (2014)	0.0%	0	480	480	0%
Grand Total Type		0.0%	0.0%	1.0%	0.0%	

4.3.2 Market Forecast – Quarterly – Unseasoned Woodfree

Similarly, we summarize the following quarterly market forecast for Unseasoned Woodfree (Total, followed by Russia, France and Central) in Europe-30, 10 Europe-10 and 2 Europe-10.

a) Unseasoned Woodfree Market (Quarterly Forecast)

TABLE 46. UWP – QUARTERLY MARKET, EUROPE-30						
Europe-30						
Year		Domestic	Imports	Exports	Self-sufficiency	Capacity, by Area
2010	Q1	1522	110	281	851	2200
	Q2	1600	110	280	910	2200
	Q3	1522	110	280	1032	2200
	Q4	1522	110	310	1102	2200
	Total 2010	6066	440	1151	5875	8800
2011	Q1	1600	110	310	980	2200
	Q2	1710	110	280	1020	2200
	Q3	1620	110	300	1090	2200
	Q4	1620	110	310	1080	2200
	Total 2011	6550	440	1200	6090	8800
2012	Q1	1700	110	300	1070	2200
	Q2	1700	110	300	1090	2200
	Q3	1620	110	300	1090	2200
	Q4	1620	110	300	1070	2200
	Total 2012	6640	440	1200	6030	8800
2013	Q1	1700	110	300	1090	2200
	Q2	1620	110	300	1090	2200
	Q3	1620	110	300	1090	2200
	Q4	1620	110	300	1090	2200
	Total 2013	6560	440	1200	6070	8800
2014		6200	440	1200	5560	8800
2015		6170	440	1200	5530	8800
2016-17 (avg)		6170	440	1200	5530	8800

Source: ENGE, 2010/11/17, 2011

1999-2000 1999-2000

1000

100

Year		Revenue	Expenses	Profit	Revenue	Expenses	Profit
2010	Q1	100	80	20	100	80	20
	Q2	120	90	30	120	90	30
	Q3	110	85	25	110	85	25
	Q4	130	95	35	130	95	35
	Total 2010	460	350	110	460	350	110
2011	Q1	110	85	25	110	85	25
	Q2	130	95	35	130	95	35
	Q3	120	90	30	120	90	30
	Q4	140	100	40	140	100	40
	Total 2011	480	370	110	480	370	110
2012	Q1	120	90	30	120	90	30
	Q2	140	100	40	140	100	40
	Q3	130	95	35	130	95	35
	Q4	150	110	40	150	110	40
	Total 2012	500	395	105	500	395	105
2013	Q1	130	95	35	130	95	35
	Q2	150	105	45	150	105	45
	Q3	140	100	40	140	100	40
	Q4	160	115	45	160	115	45
	Total 2013	520	415	105	520	415	105
2014		550	440	110	550	440	110
2015		580	460	120	580	460	120
Grand Total		2470	1875	595	2470	1875	595

Abstract

to CWT Ratio, Ratio of Cut-Area Demand (Quantity) Forecasts

TABLE 14. LUMP SUM VOLUME & CWT RATIO - Q DEMAND, SCENARIO 10						
Scenario 10						
Year		Ratio	Ratio	Cut-Area	Forecast CWT	Forecast Q
2010	Q1	100	100	100	1000	10
	Q2	110	100	101	1000	110
	Q3	120	110	102	1000	120
	Q4	130	120	103	1000	130
Total (Q1-Q4)		460	430	406	4000	460
2011	Q1	140	130	104	1000	140
	Q2	150	140	105	1000	150
	Q3	160	150	106	1000	160
	Q4	170	160	107	1000	170
Total (Q1-Q4)		520	520	422	4000	520
2012	Q1	180	170	108	1000	180
	Q2	190	180	109	1000	190
	Q3	200	190	110	1000	200
	Q4	210	200	111	1000	210
Total (Q1-Q4)		580	540	438	4000	580
2013	Q1	220	210	112	1000	220
	Q2	230	220	113	1000	230
	Q3	240	230	114	1000	240
	Q4	250	240	115	1000	250
Total (Q1-Q4)		640	560	455	4000	640
2014		260	250	116	4000	260
2015		270	260	117	4000	270
2016-2019		280	270	118	4000	280

Source: ENGE & The Windward Group

1999

Year	Q1	Q2	Q3	Q4	Total 2000	Growth %
2000	Q1	100	110	120	330	10%
	Q2	110	120	130	360	10%
	Q3	120	130	140	390	10%
	Q4	130	140	150	420	10%
Total 2000		460	500	540	1500	30%
2001	Q1	140	150	160	450	10%
	Q2	150	160	170	480	10%
	Q3	160	170	180	510	10%
	Q4	170	180	190	540	10%
Total 2001		580	660	700	2040	30%
2002	Q1	180	190	200	570	10%
	Q2	190	200	210	600	10%
	Q3	200	210	220	630	10%
	Q4	210	220	230	660	10%
Total 2002		780	820	860	2460	30%
2003	Q1	220	230	240	690	10%
	Q2	230	240	250	720	10%
	Q3	240	250	260	750	10%
	Q4	250	260	270	780	10%
Total 2003		940	980	1020	2940	30%
2004		1000	1050	1100	3150	7%
2005		1050	1100	1150	3300	5%
Overall Avg		8.2%	8.7%	9.2%	8.9%	

100

Year		Male	Female	Combined	Total (2000)	Percent
2000	Q1	10	10	110	200	10%
	Q2	10	10	110	200	10%
	Q3	10	10	110	200	10%
	Q4	10	10	110	200	10%
Total 2000		200	200	400	400	20%
2001	Q1	10	10	110	200	10%
	Q2	10	10	110	200	10%
	Q3	10	10	110	200	10%
	Q4	10	10	110	200	10%
Total 2001		200	200	400	400	20%
2002	Q1	10	10	110	200	10%
	Q2	10	10	110	200	10%
	Q3	10	10	110	200	10%
	Q4	10	10	110	200	10%
Total 2002		200	200	400	400	20%
2003	Q1	10	10	110	200	10%
	Q2	10	10	110	200	10%
	Q3	10	10	110	200	10%
	Q4	10	10	110	200	10%
Total 2003		200	200	400	400	20%
2004		200	200	200	400	20%
2005		200	200	200	400	20%
Grand Total		1,000	1,000	1,000	4,000	20%

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