



# ASPHALT IN FIGURES

2012

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EAPA is the European industry association which represents the manufacturers of bituminous mixtures and companies engaged in asphalt road construction and maintenance and it has the mission to promote the good use of asphalt in the creation and maintenance of a sustainable European road network. Conscious of the importance of providing information to the public, EAPA is pleased to present to you the data of 'Asphalt in Figures' for the year 2012.

As you can see in the figures of 2012 the global economic crises had its influence in 2012 with a decrease of 15% in the total asphalt production in Europe compared with 2011.

**Mr. Jean-Louis Marchand**  
President EAPA



## KEY FIGURES OF THE EUROPEAN ASPHALT INDUSTRY IN 2012

In this overview, between a number of European countries, data refer to asphalt production, application and the use of binders. Furthermore several reference data on the road in general are given. The data have been established with the assistance of the members of the European Asphalt Pavement Association, and are at the moment the best available and reliable for the asphalt industry.

A blank means no data are supplied or available; '-' means the number is insignificant; "... \*" figure not provided but estimated. All figures are in metric tonnes.

### TOTAL PRODUCTION OF HOT AND WARM MIX ASPHALT IN 2007 - 2012 (in million tonnes)

Country	2007	2008	2009	2010	2011	2012
Austria	9,5	9,5	9,0	8,2	8	7,2
Belgium	4,5	4,9	4,7	4,8	5,9	5,6
Croatia	3,7*	4,2	3,2	2,7	2,6	2,5
Czech Republic	7,0	7,3	7,0	6,2	5,8	5,6
Denmark	3,3	3,1	2,7	3,2	4,0	3,6
Estonia	1,5	1,5	1,2	1,1	1,3	1,1
Finland	5,9	6,0	5,2	4,9	5,0	4,5
France	42,3	41,8	40,1	38,8	39,2	35,3
Germany	51,0	51,0	55,0	45,0	50	41
Great Britain	25,7	25,0	20,5	21,5	22,4	18,5
Greece	8,0	8,1	8,7	5,2	2,3	1,6
Hungary	3,3	2,5	1,6	3,4	2,3	2,5
Iceland	0,3	0,4	0,3	0,2	0,2	0,2
Ireland	3,3	2,8	3,3	2,3	1,8	1,9
Italy	39,9	36,5	34,9	29,0	28	23,2
Latvia	0,6*	0,6*	0,6*	0,6*	0,6*	0,6*
Lithuania	1,7	2,2	1,5	1,6	1,6	1,3
Luxembourg	0,6	0,6*	0,6	0,7	0,65	0,61
Netherlands	10,2	9,3	9,8	9,5	9,6	9,2
Norway	5,9	5,7	6,5	5,9	6,7	6,3
Poland	18,0*	15,0	18,0	18,0	26,5	21,1
Portugal	9,0	9,0*	9,0*	6,7	6,4	6,4*
Romania	3,2	3,3	3,6	3,2	3,6	3,2
Slovakia	2,2*	2,2*	2,2	1,9	2,2	1,9
Slovenia	2,1	2,6	2,3	1,8	1,3	1,1
Spain	49,9	42,3	39,0	34,4	29,3	19,5
Sweden	7,7	8,7	8,1	7,9	8,1	7,7
Switzerland	5,2	5,3	5,4	5,3	5,4	4,8
Turkey	22,2	26,6	23,1	35,3	43,5	38,4
<b>Europe</b>	<b>347,7</b>	<b>338,0</b>	<b>317,3</b>	<b>309,3</b>	<b>324,3</b>	<b>276,4</b>

Australia	9,0	9,5	9,5*	7,52		8,8
New Zealand						1
Japan	54,9	49,6	49,6	44,7	45,6	47,3
Ontario - Canada	13,2	13,2*	13,2*	14	13,5	13,0
U.S.A.	500	440	324	326	332	323,5
South Africa					5,7	5,7
South Korea			35,6	20,7		23,2

### APPLICATION IN SURFACE-, BINDER- AND BASE COURSES IN % OF TOTAL ANNUAL HMA PRODUCTION

Country	Surface course	Binder course	Base course
Austria	20	10	70
Belgium	47		53
Croatia	59	4	37
Czech Republic	59	17	24
Denmark	47	10	43
Estonia	No data	No data	26
Finland	93	0	7
Germany	28	21	51
Greece	85	10	5
Hungary	51	36	13
Iceland	95	5	
Italy	50	30	20
Lithuania	44	26	30
Luxembourg	40	55	5
Netherlands	40	11	49
Norway	80	10	10
Poland	33	32	35
Romania	20	26	54
Slovakia	59	30	11
Slovenia	52	4	44
Spain	48	33	19
Sweden	50	15	35
Switzerland	26	22	52
Turkey	48	27	25
Japan	80	12	8
Ontario - Canada	60		40
South Africa	No data	Not used	No data

## SURFACE COURSES WITH ASPHALT CONCRETE EN 13108-1

Country	% of total annual hot and warm mix asphalt production in 2012	In '12 applied area in million m <sup>2</sup>	Total area in million m <sup>2</sup> incl. 2012
Austria	19,0		
Belgium	33,3		
Croatia	55,6	14,6	
Czech Republic	52,9	20,0	
Denmark	27,4	13,6	
Finland	73,0		
Germany	17,0		
Greece	83,0	15,7	
Hungary	48,0	13,7	
Iceland	94,0	1,5	
Italy	41,0		
Lithuania	35,2		
Luxembourg	20,0	1,2	
Netherlands	19,0		
Poland	27,0		
Romania	3,8	20,0	
Slovakia	56,0	8,7	
Slovenia	49,0	10,5	
Spain	30,0		
Sweden	25,0	30,0	
Switzerland	15,0	4,2	
Turkey	45,0		
Japan	No data		

## SURFACE COURSES WITH STONE MASTIC ASPHALT EN 13108-5

Country	% of total annual hot and warm mix asphalt production in 2012	In '12 applied area in million m <sup>2</sup>	Total area in million m <sup>2</sup> incl. 2012
Austria	0,9		
Belgium	17,3	11,8	
Croatia	2,3	0,7	
Czech Republic	4,2	1,8	
Denmark	19,5	8,2	61,3
Estonia	7,0		
Finland	9,0		
Germany	10,0		
Hungary	2,7	2,6	
Iceland	6,0	0,1	
Italy	2,0		
Lithuania	7,3		
Luxembourg	16,8	0,9	
Netherlands	10,0		
Poland	5,6		
Romania	3,0	45,0	
Slovakia	3,0	0,1	
Slovenia	2,5	0,4	
Spain	0,6		
Sweden	20,0	20,0	
Turkey	3,0		
Japan			

## SURFACE COURSES WITH BBTM EN 13108-2

Country	% of total annual hot and warm mix asphalt production in 2012	In '12 applied area in million m <sup>2</sup>	Total area in million m <sup>2</sup> incl. 2012
Austria			
Belgium	1,6	1,24	
Croatia	0,6	0,24	
Czech Republic	0,4	0,20	
Greece	2,0	0,30	
Romania	2,3	10,00	
Spain	15,7		
Switzerland	3,0	1,12	24,4
Japan	No data		

## SURFACE COURSES WITH MASTIC ASPHALT EN13108-6

Country	% of total annual hot and warm mix asphalt production in 2012	In '12 applied area in million m <sup>2</sup>	Total area in million m <sup>2</sup> incl. 2012
Austria	0,10		
Belgium	0,35		
Czech Republic	0,80	0,20	
Finland	0,40		
France	0,58		
Germany	1,00		
Italy	0,50		
Hungary	0,20	0,02	
Netherlands	1,00		
Poland	0,40		
Romania	5,00	25,00	
Slovenia	0,20		
Sweden	<1	0,20	
Japan	No data		

## SURFACE COURSES WITH SOFT ASPHALT EN 13108-3

Country	% of total annual hot and warm mix asphalt production in 2012	In '12 applied area in million m <sup>2</sup>	Total area in million m <sup>2</sup> incl. 2012
Finland	10,6		
Lithuania	1,5		
Sweden	5,0	10,0	

## CONSUMPTION OF BITUMEN IN THE ROAD INDUSTRY (in million tonnes)

Country	Tonnage in 2012	% Modified bitumen (of total)			Emulsions in 2012
		in 2010	in 2011	in 2012	
Austria	0,55	35	25	25	0,004
Belgium	0,23	24,4	25,5	27	No data
Czech Republic	0,31	16	18	22,4	0,015
Denmark	0,18	5	5	5	0,017
Finland	0,27	0	0		0,009
France	2,73	<10	<10	0,13	0,820
Germany	1,80	No data	No data	No data	
Great Britain	1,19	8		8	0,105
Greece	0,08	2	2	1,5	0,002
Hungary	0,11	12	11	15,4	0,015
Iceland	0,02				0,005
Ireland	0,13	25	No data	No data	0,030
Italy	1,19	13,3	14	13	0,050
Lithuania	0,10	18	14	11	0,003
Luxembourg	0,04	15	20	30	0,001
Netherlands	0,30		No data	No data	No data
Norway	0,31	13	15	No data	No data
Poland	1,20	22	21	22	0,105
Romania	0,17	45	74	45	0,100
Slovakia	0,10		60	37	0,010
Slovenia	0,05		10	11	0,001
Spain	0,83	14,3	13,1	19,6	0,081
Sweden	0,40	6	6	5	0,040
Switzerland	0,24	12	10	11	No data
Turkey	2,81	4	8	7,5	0,065
Japan	1,79	19,6	22,1	28,6	
Ontario-Canada	0,65	15	25	10	0,016
South Africa	0,43				0,160

## SURFACE COURSES WITH HOT ROLLED ASPHALT EN 13108-4

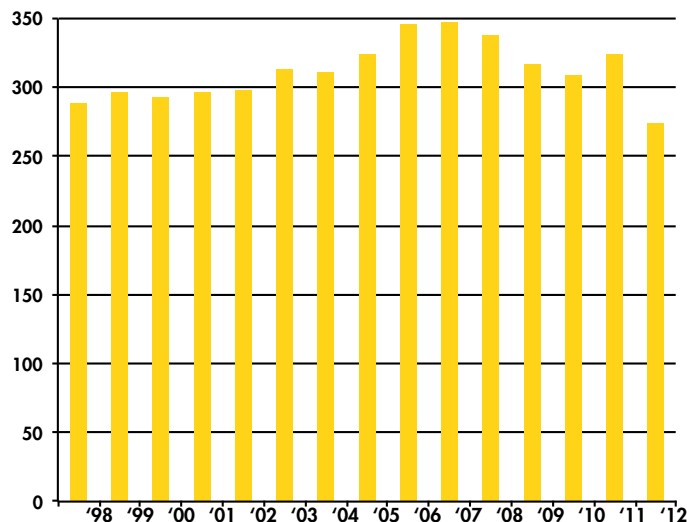
Country	% of total annual hot and warm mix asphalt production in 2012	In '12 applied area in million m <sup>2</sup>	Total area in million m <sup>2</sup> incl. 2012
European countries	No data		
Japan	No data		

## SURFACE COURSES WITH POROUS ASPHALT EN13108-7

Country	% of total annual hot and warm mix asphalt production in 2012	In '12 applied area in million m <sup>2</sup>	Total area in million m <sup>2</sup> incl. 2012
Belgium	0,37	0,25	
Czech Republic	0,20	0,10	
Denmark	0,21	0,14	2,70
Hungary	0,10	0,00	
Italy	6,50		
Luxemburg	3,20	0,20	
Netherlands	10,00		
Slovenia	0,30		
Spain	0,70		
Sweden	<1	0,20	
Switzerland	8,00	1,90	29,6
Japan	4,00		

## TOTAL PRODUCTION OF HOT AND WARM MIX ASPHALT IN EUROPE

(in million tonnes)



## RECYCLING

Country	Available reclaimed asphalt (tonnes)	% of available reclaimed asphalt used in				% of the new hot and warm mix production that contains reclaimed material
		hot and warm recycling	half warm recycling	cold recycling	unbound layers	
Austria	750.000	95		3	2	
Belgium	1.500.000	61	No data	No data	No data	49
Czech Republic	1.400.000	22	0	30	15	10
Croatia						2
Denmark	580.000	77			23	47
Finland	1.000.000					65
France	6.500.000	62	No data	No data	No data	>60
Germany	11.500.000	87			13	97
Greece						0,02
Great Britain	4.500.000					
Hungary	100.777	93	0	7	0	46
Iceland	15.000				25	2,5
Ireland	150.000	10	0	0	No data	10,0
Italy	10.000.000	20				
Luxembourg	210.000	90	5	5	0	60
Netherlands	4.000.000	80		15,00		73
Norway	787.689	18	No data	2,90	66	13
Poland	~ 100.000	~ 4				~ 0,2
Romania	20.000	30	15	30	25	5,0
Slovakia	33.000	90	0	5	5	0,0
Slovenia	10.000		30	20	50	
Spain	368.000	66		11	6	6,4
Sweden	1.000.000	75	5	5	10	70
Switzerland	1.575.000	52	19	17	9	24
Turkey	3.816.000	2		5	93	1
Australia	533.000	17				
Japan						70
U.S.A.	64.000.000	95			5	
Ontario-Canada	3.500.000	80		3	17	75

## COLD BITUMINOUS MIXES

(annual tonnage)

Country	2010 (tonnes)	2011 (tonnes)	2012 (tonnes)
Austria	10.000	20.000	20.000
Belgium	30.000	33.000	27.000
Croatia	30.000	21.000	23.000
Czech Republic	11.620	9.907	4.421
Denmark	≈ 0	≈ 0	≈ 0
France	> 1.500.000	1.600.000	1.460.000
Greece			0
Hungary	0	40.000	15.400
Iceland		No data	
Lithuania	61.936	59.950	37.477
Luxembourg	0,00	0	2.000
Netherland			20.000
Norway	9.000	37.000	6.000
Poland	61.000	No data	<1000
Romania	22.000	13.000	2.000
Slovakia		3.000	0
Spain	185.000	200.000	92.400
Sweden	70.000	60.000	90.000
Switzerland	630.000	740.000	710.000
Turkey	2.370.000	1.020.000	1.818.000
Japan	104000	95.000	105.000
Mexico	3300000		

## APPLICATION OF SLURRY SEAL AND MICRO-SURFACING/SURFACE DRESSING

(in million m2)

Country	SS&MS 2012	Trend '11/'12	SD 2012
Austria	0,50	<	
Croatia	0,50		0,00
Czech Republic	1,20	=	0,90
Denmark	0,03	>	5,90
Estonia	No data	No data	10,72
Finland		>	0,62
France	40,00	=	202,00
Greece	0,15	>	>
Hungary		<	0,03
Iceland	0,10	=	3,80
Lithuania	0,30	>>	0,30
Luxembourg	No data	>	>>
Norway		=	1,40
Poland	0,95	>	2,90
Romania	0,50		
Slovakia	0,90	>	0,00
Slovenia	<		<
Spain	8,60	>	
Sweden	2,00		10,00
Switzerland	0,35	=	0,38
Turkey			259,00
Japan	0,0063	<<	No data

## NUMBER OF PRODUCTION SITES

Country	Stationary Plants		Mobile plants		Number fit for hot recycling	
	2011	2012	2011	2012	2011	2012
Austria	112	112	1	1	80	80*
Belgium	36	38	0	0	25	28
Croatia	52	52	3	3	5	5
Czech Republic	110	105	3	2	70	70
Denmark	42	40	3	3	40	38
Estonia	23	10	13	13	11	11
Finland	55	52	26	20	45	55
France **	437	438	69	67	>200	>300
Germany	648	635			622	610
Great Britain ***	250	250				
Greece ****	210	155	5	5	1	1
Hungary	73	84	5	5	39	40
Iceland ****	4	4	4	4	2	2
Ireland	40	37	0		5	3
Italy	640	640	10	10	300	300
Lithuania	37	38	1	3	24	24
Luxembourg	4	4		0	3	2
Netherlands	41	41	0	1	40	40
Norway	85	85	11	10	25	25
Poland	300	300	35	35	4	4
Portugal	25	25*	25	25*	15	15*
Romania		8		2		8
Slovakia	54	54	0	0	22	22
Slovenia	14	13		1		8
Spain	359	295	97	80	159	87
Sweden	85	87	10	10	75	80
Switzerland	143	142	2	2	75	78
Turkey ***	212	225	431	437	10	10

**Europe**      **4091**      **3969**      **754**      **739**      **1896**      **1946**

Australia***		137		32		
Japan	1160	1160	12	5	996	979
New Zealand		50		6		
Ontario - Canada	120	140	30	22	125	135
South Africa	27	28	22	23	31	32
South Korea		471		0		
USA****	3500					

\*\* One or more plants are operated and owned by the road administration

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\*\*\*\* Total of stationary and mobile plants

## COMPANIES IN THE ASPHALT INDUSTRY

Country	Production only	Production & Laying	Laying only
Austria			66
Belgium	9		19
Croatia			39
Czech Republic	19		27
Denmark	0		7
Estonia	1		5
Finland	0		10
France			30
Germany	260		150
Great Britain	19		24
Greece	160		160
Hungary	2		28
Iceland	1		4
Ireland	18		18
Italy	30		500
Lithuania			20
Luxembourg			3
Netherlands			22
Norway	7		19
Poland	4		260
Portugal	10*		16*
Romania	10		12
Slovakia	2		14
Slovenia	14		8
Spain	9		152
Sweden	0		10
Switzerland	63		79
Turkey	2		265

**Europe**      **640**      **1967**      **7810**

Australia	20		19
Japan			729
New Zealand			20
Ontario-Canada			50
South Korea			471
South Africa	6		9

## PRODUCTION OF WARM MIX ASPHALT IN 2012

For this table **Warm Mix Asphalt** is defined as mixtures produced by using special techniques and/or additives to reduce the production temperature. The production temperature is between 100°C and 150°C.

Country	2012 (million tonnes)
Austria	0,000
Belgium	No data
Croatia	0,000
Czech Republic	0,000
Denmark	0,020
Finland	0,490
France	2,633
Germany	No data
Great Britain	<1,000
Greece	0,000
Hungary	0,002
Ireland	0,001
Lithuania	Insignificant
Luxemburg	0,010
Netherlands	0,070
Norway	0,020
Spain	0,070
Sweden	0,500
Switzerland	0,780
Romania	1,500

USA	77,100
Japan	0,156
Ontario-Canada	0,600
South Africa	0,120

## INTERESTING SITES ON THE INTERNET

<a href="http://www.eapa.org">www.eapa.org</a>	European Asphalt Pavement Association
<a href="http://www.sdruzeni-silnice.cz">www.sdruzeni-silnice.cz</a>	Road Contractors Association Prague
<a href="http://www.asfaltindustrien.dk">www.asfaltindustrien.dk</a>	Danish Asphalt Pavement Association
<a href="http://www.vbwasfalt.nl">www.vbwasfalt.nl</a>	Dutch Asphalt Pavement Association
<a href="http://www.asfaltiliit.ee">www.asfaltiliit.ee</a>	Estonian Asphalt Pavement Association
<a href="http://www.infrary.fi">www.infrary.fi</a>	Infra Contractors' Association
<a href="http://www.usirf.com">www.usirf.com</a>	L'Union des Syndicats de l'industrie Routière Française
<a href="http://www.asphalt.de">www.asphalt.de</a>	German Asphalt Association
<a href="http://www.gestrata.at">www.gestrata.at</a>	Gestrata
<a href="http://www.hapa.hu">www.hapa.hu</a>	Hungarian Asphalt Pavement Association
<a href="http://www.siteb.it">www.siteb.it</a>	Italian Asphalt Association
<a href="http://www.ebanett.no">www.ebanett.no</a>	EBA - Norwegian Contractors Association
<a href="http://www.pswana.pl">www.pswana.pl</a>	Polish Asphalt Pavement Association
<a href="http://www.apdp.ro">www.apdp.ro</a>	Professional Association of Roads and Bridges of Romania
<a href="http://www.mischgut-industrie.ch">www.mischgut-industrie.ch</a>	Schweizerische Mischgut-Industrie
<a href="http://www.saav.sk">www.saav.sk</a>	Slovakian Asphalt Pavement Association
<a href="http://www.zdruzenje-zas.si">www.zdruzenje-zas.si</a>	Slovenian Asphalt Pavement Association
<a href="http://www.asefma.es">www.asefma.es</a>	Spanish Asphalt Association
<a href="http://www.asmud.org.tr">www.asmud.org.tr</a>	Turkish Asphalt Contractors Association
<a href="http://www.mineralsproducts.org">www.mineralsproducts.org</a>	UK Minerals Products Association
<a href="http://www.amaac.org.mx">www.amaac.org.mx</a>	Asociacion Mexicana del Asfalto, A.C
<a href="http://www.galpenergia.com">www.galpenergia.com</a>	Galp Energia Portugal
<a href="http://www.malbik.is">www.malbik.is</a>	Hofdi Asphalt Plant
<a href="http://www.colas.is">www.colas.is</a>	Colas Iceland
<a href="http://www.vegagerdin.is">www.vegagerdin.is</a>	Icelandic Road Administration
<a href="http://www.pch.public.lu">www.pch.public.lu</a>	L'administration des Ponts et Chaussées Luxembourg
<a href="http://www.eurobitume.eu">www.eurobitume.eu</a>	European Bitumen Association
<a href="http://www.oecd.org/cem">www.oecd.org/cem</a>	World Economic Organisation
<a href="http://www.piarc.org/en">www.piarc.org/en</a>	World Road Congress
<a href="http://www.lra.lt">www.lra.lt</a>	Lithuanian Road Administration
<a href="http://www.h-r-d.hr">www.h-r-d.hr</a>	Hrvatsko asfalterско društvo
<a href="http://www.asphaltpavement.org">www.asphaltpavement.org</a>	US National Asphalt Pavement Association
<a href="http://www.aapa.asn.au">www.aapa.asn.au</a>	Australian Asphalt Pavement Association
<a href="http://www.asphaltinstitute.org">www.asphaltinstitute.org</a>	Ontario Hot Mix Producers Association
<a href="http://www.sabita.org">www.sabita.org</a>	South African Asphalt and Bitumen Association
<a href="http://www.dohkenkyo.or.jp">www.dohkenkyo.or.jp</a>	Japan Road Contractors Association
<a href="http://www.roadingnz.org.nz">www.roadingnz.org.nz</a>	Roading New Zealand

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