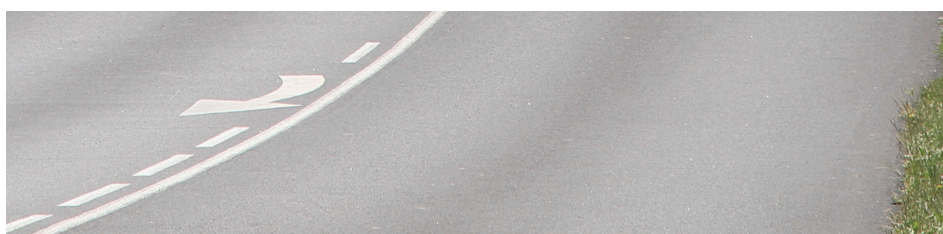




ASPHALT IN FIGURES

2013



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 2013.

Mr Ayberk Özcan
President EAPA



KEY FIGURES OF THE EUROPEAN ASPHALT INDUSTRY IN 2013

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 mass figures are in metric tonnes.

TOTAL PRODUCTION OF HOT AND WARM MIX ASPHALT IN 2008 - 2013 (in million tonnes)

Country	2008	2009	2010	2011	2012	2013
Austria	9,5	9,0	8,2	8,0	7,2	7,0
Belgium	4,9	4,7	4,8	5,9	5,6	5,3
Croatia	4,2	3,2	2,7	2,6	2,5	2,8
Czech Republic	7,3	7,0	6,2	5,8	5,6	5,4
Denmark	3,1	2,7	3,2	4,0	3,6	3,7
Estonia	1,5	1,2	1,1	1,3	1,1	1,2
Finland	6,0	5,2	4,9	5,0	4,5	4,5
France	41,8	40,1	38,8	39,2	35,3	35,4
Germany	51,0	55,0	45,0	50	41	41,0
Great Britain	25,0	20,5	21,5	22,4	18,5	19,2
Greece	8,1	8,7	5,2	2,3	1,6	2,7
Hungary	2,5	1,6	3,4	2,3	2,5	2,7
Iceland	0,4	0,3	0,2	0,2	0,2	0,2
Ireland	2,8	3,3	2,3	1,8	1,9	1,8
Italy	36,5	34,9	29,0	28	23,2	22,3
Latvia	0,6*	0,6*	0,6*	0,6*	0,6*	0,6*
Lithuania	2,2	1,5	1,6	1,6	1,3	1,3*
Luxembourg	0,6*	0,6	0,7	0,65	0,61	0,7
Netherlands	9,3	9,8	9,5	9,6	9,2	9,7
Norway	5,7	6,5	5,9	6,7	6,3	6,4
Poland	15,0	18,0	18,0	26,5	21,1	18,2
Portugal	9,0*	9,0*	6,7	6,4	6,4*	6,4*
Romania	3,3	3,6	3,2	3,6	3,2	4,1
Slovakia	2,2*	2,2	1,9	2,2	1,9	1,6
Slovenia	2,6	2,3	1,8	1,3	1,1	1,2
Spain	42,3	39,0	34,4	29,3	19,5	13,2
Sweden	8,7	8,1	7,9	8,1	7,7	7,6
Switzerland	5,3	5,4	5,3	5,4	4,8	4,8
Turkey	26,6	23,1	35,3	43,5	38,4	46,2
Europe	338,0	317,3	309,3	324,3	276,4	277,3

Australia	9,5	9,5*	7,52		8,84	
New Zealand					1,0	1,0
Japan	49,6	49,6	44,7	45,6	47,3	49,9
Ontario - Canada	13,2*	13,2*	14	13,5	13,0	
U.S.A.	440	324	326	332	326,9	318,1
South Africa				5,7	5,7	5,5
South Korea		35,6	20,7		23,2	26,2

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

Country	Surface course	Binder course	Base course
Austria	25	10	65
Belgium	50		50
Croatia	54	5	41
Czech Republic	60	18	22
Denmark	42	9	49
Estonia	67	7	26
Finland	91	0	9
Germany	30	19	51
Greece	87	10	3
Hungary	68	18	14
Iceland	95	5	
Italy	50	30	20
Lithuania			
Luxembourg	50	45	5
Netherlands	35	12	53
Norway	80	10	10
Poland	33	32	35
Romania	20	35	45
Slovakia	61	23	16
Slovenia	53	13	34
Spain	61	24	15
Sweden	55	15	30
Switzerland	23	24	53
Turkey	42	33	25
Japan	80	12	8
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 2013	In '13 applied area in million m ²
Austria	23,6	
Belgium	33,1	No data
Croatia	51,4	19,0
Czech Republic	51,9	20,0
Denmark	30,7	15,5
Estonia	58,8	
Finland	72,8	
Germany	19,0	No data
Greece	83,0	18,1
Hungary	64,6	17,6
Iceland	94,3	1,5
Italy	41,0	
Lithuania		
Luxembourg	25,0	3,1
Netherlands	16,0	
Norway	64,0	0,8
Poland	27,1	
Romania	12,4	4,2
Slovakia	58,6	10,4
Slovenia	50,6	5,5
Spain	47,7	42,1
Sweden	25,0	30,0
Switzerland	14,0	3,9
Turkey	95,0	
Japan	No data	20,9

SURFACE COURSES WITH BTM EN 13108-2

Country	% of total annual hot and warm mix asphalt production in 2013	In '13 applied area in million m ²
Belgium	2,4	1,73
Croatia	0,9	0,60
Czech Republic	0,5	0,50
Greece	4,0	1,90
Hungary	0,1	0,00
Poland	0,3	
Romania	4,8	1,64
Spain	4,0	6,90
Switzerland	4,0	1,30
Japan	No data	0,50

SURFACE COURSES WITH HOT ROLLED ASPHALT EN 13108-4

Country	% of total annual hot and warm mix asphalt production in 2013	In '13 applied area in million m ²
European countries	No data	
Japan	No data	0,01

SURFACE COURSES WITH STONE MASTIC ASPHALT EN 13108-5

Country	% of total annual hot and warm mix asphalt production in 2013	In '13 applied area in million m ²
Austria	1,3	
Belgium	13,8	8,1
Croatia	1,7	1,0
Czech Republic	6,5	3,2
Denmark	10,6	4,6
Estonia	8,4	
Finland	11,3	
Germany	10,0	No data
Hungary	3,2	2,5
Iceland	5,7	0,1
Italy	1,5	
Lithuania		
Luxembourg	22,5	2,7
Netherlands	9,0	
Norway	8,0	0,1
Poland	5,0	
Romania	2,8	4,8
Slovakia	2,4	0,3
Slovenia	2,1	0,5
Spain	0,3	0,4
Sweden	25,0	30,0
Turkey	5,0	
Japan	no data	0,3

SURFACE COURSES WITH SOFT ASPHALT EN 13108-3

Country	% of total annual hot and warm mix asphalt production in 2013	In '13 applied area in million m ²
Finland	6,4	
Lithuania		
Norway	8,0	0,1
Sweden	5,0	10,0

SURFACE COURSES WITH MASTIC ASPHALT EN13108-6

Country	% of total annual hot and warm mix asphalt production in 2013	In '13 applied area in million m ²
Austria	0,1	
Belgium	0,44	No data
Czech Republic	0,80	0,40
Estonia	0,01	
Finland	0,36	
Germany	1,00	No data
Italy	0,50	
Hungary	0,07	0,05
Poland	0,30	
Slovenia	0,03	
Sweden	<1	0,20
Japan	No data	0,10

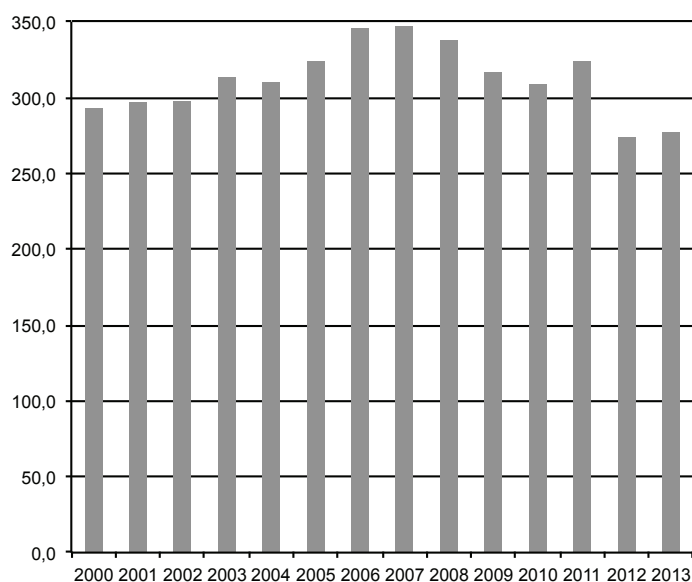
SURFACE COURSES WITH POROUS ASPHALT EN13108-7

Country	% of total annual hot and warm mix asphalt production in 2013	In '13 applied area in million m ²
Belgium	0,62	0,39
Czech Republic	0,20	0,10
Denmark	0,12	0,09
Estonia	0,20	
Hungary	0,07	0,05
Italy	7,00	
Luxemburg	2,50	0,40
Netherlands	10,00	
Poland	0,30	
Slovenia	0,21	
Spain	0,20	0,25
Sweden	<1	0,20
Switzerland	10,00	2,30
Japan	No data	3,29

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

Country	Tonnage in 2013	% Modified bitumen (of total)			Emulsions in 2013
		in 2011	in 2012	in 2013	
Austria	0,50	25	25	30	0,005
Belgium	0,23	25,5	27	25,4	No data
Croatia	0,15			7,5	0,000
Czech Republic	0,29	18	22,4	22,1	0,016
Denmark	0,19	5	5	5	0,018
Estonia	0,08			4	0,003
Finland	0,26	0		0	0,001
France	2,69	<10	13	13	0,870
Germany	1,70	No data	No data		
Great Britain	1,22	8	8	8	0,100
Greece	0,13	2	1,5	2,2	0,004
Hungary	0,14	11	15,4	30	0,002
Iceland	0,02				0,005
Ireland	0,13	No data	No data		0,035
Italy	1,13	14	13	14	0,040
Lithuania	0,10	14	11		
Luxembourg	0,04	20	30		0,001
Netherland	0,32	No data	No data	5	0,000
Norway	0,32	15	No data	No data	No data
Poland	0,97	21	22	25	
Romania	0,20	74	45	76	insignificant
Slovakia	0,10	60	37	31	0,010
Slovenia	0,05	10	11	9	0,001
Spain	0,50	13,1	19,6	10	0,082
Sweden	0,40	6	5		0,040
Switzerland	0,24	10	11	2	No data
Turkey	2,80	8	7,5	4,4	0,051
Japan	1,89	22,1	28,6	20,8	0,106
South Africa	0,39			No data	0,170

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	51
Czech Republic	1.450.000	18	0	25	20	10
Denmark	790.000	83			17	58
Finland	860.000					20
France	6.900.000	64	No data	No data	No data	>65
Germany	11.500.000	90			10	No data
Greece	No data					0,03
Great Britain	4.000.000-5.000.000					
Hungary	88.000	80	0	10	10	20
Iceland	15.000					3,0
Ireland	150.000					
Italy	10.000.000	20				
Luxembourg	300.000	90	0	10	0	50
Netherlands	4.500.000	76				70
Norway	686.268	21	0	5	74	20
Romania	22.000	20	20	20	30	10
Slovakia	26.000	90	0	5	5	
Slovenia	26.000	26	0	20	54	5
Spain	205.000	85		7	8	1,3
Sweden	900.000	80	5	5	10	70
Switzerland	1.370.000	48	17	15	8	27
Turkey	1.200.000	3		1	96	1
Japan						76
U.S.A.	69.000.000	92			8	

COLD BITUMINOUS MIXES (annual tonnage)

Country	2011 (tonnes)	2012 (tonnes)	2013 (tonnes)
Austria	20.000	20.000	30.000
Belgium	33.000	27.000	30.000
Croatia	21.000	23.000	32.000
Czech Republic	9.907	4.421	9.570
France	1.600.000	1.460.000	1.550.000
Greece		0	
Hungary	40.000	15.400	58.800
Lithuania			
Luxembourg	0	2.000	0,01
Netherland		20.000	0
Norway	37.000	6.000	20.000
Poland			
Romania	13.000	2.000	2.625
Slovakia	3.000	0	
Slovenia			26.000
Spain	200.000	92.400	86.700
Sweden	60.000	90.000	90.000
Switzerland	740.000	710.000	830.000
Turkey	1.020.000	1.818.000	1.050.000
Japan	95.000	105.000	114.000

APPLICATION OF SLURRY SEAL AND MICRO-SURFACING/SURFACE DRESSING (in million m2)

Country	SS&MS 2013	Trend '12/'13	SD 2013
Austria	0,50	=	0,00
Croatia	0,40		0,00
Czech Republic	1,00	=	1,00
Denmark	0,00	>	6,20
Estonia	0,04	<	12,00
Finland		>	0,69
France	50,00	=	214,00
Greece	0,30	>	0,00
Hungary	0,00	<	0,00
Iceland	0,10	<	3,00
Lithuania			
Luxembourg	0,50	>	0,15
Norway		=	1,00
Slovakia	0,70	<	0,00
Slovenia	No data	No data	No data
Spain	22,70	>	
Sweden	2,20	>	11,00
Switzerland	0,36	=	0,37
Turkey	0,30		233,50
Japan	0,0065	<	No data

NUMBER OF PRODUCTION SITES

Country	Stationary Plants		Mobile plants		Number fit for hot recycling	
	2012	2013	2012	2013	2012	2013
Austria	112	113	1	1	80*	75
Belgium	38	38	0	0	28	28
Croatia	52	55	3	3	5	6
Czech Republic	105	101	2	2	70	70
Denmark	40	38	3		38	36
Estonia	10	9	13	11	11	13
Finland	52	59	20	22	55	62
France **	438	434	67	62	>300	>300
Germany	635	630			610	605
Great Britain ***	250	240				
Greece ***	155	195	5	3	1	1
Hungary	84	85	5	5	40	42
Iceland ***	4	4	4	4	2	2
Ireland	37	37		0	3	2
Italy	640	640	10	10	300	300
Lithuania	38	38*	3	3*	24	24*
Luxembourg	4	4	0	0	2	4
Netherlands	41	41	1	0	40	40
Norway	85	85	10	10	25	40
Poland	300	300	35	35	4	4
Portugal	25*	25*	25*	25*	15*	15*
Romania	8	49	2	9	8	8
Slovakia	54	51	0	0	22	
Slovenia	13	18	1	1	8	8
Spain	295	243	80	75	87	37
Sweden	87	87	10	8	80	90
Switzerland	142	147	2	2	78	83
Turkey ***	225	176	437	462	10	10

Europe	3969	3942	739	753	1946	1905
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Japan	1160	1146	5	4	979	974
New Zealand	50	50	6	6		
South Africa	28	33	23	25	32	31

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

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

**** Total of stationary and mobile plants

COMPANIES IN THE ASPHALT INDUSTRY

Country	Production only	Production & Laying	Laying only
Austria			66
Belgium	11		No data
Croatia	8		10
Czech Republic	20		>40
Denmark	0		~10
Estonia	1		11
Finland	0		15
France			>1000
Germany	260		3000
Great Britain	19		>100
Greece			3
Hungary	1		23
Iceland	1		10
Ireland	18		22
Italy	30		>2500
Lithuania			No data
Luxembourg	3		3
Netherlands			19
Norway	7		12
Poland	4		155
Portugal	10*		60*
Romania	13		8
Slovakia	2		20
Slovenia	3		>10
Spain	7		220
Sweden	0		80
Switzerland	65		>400
Turkey	11		~100

Europe	494	1948	>7832
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Japan		720	
New Zealand		20	Many
South Africa	7	11	17

PRODUCTION OF WARM MIX ASPHALT IN 2013

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	2013 (million tonnes)
Austria	0,000
Belgium	No data
Croatia	0,000
Czech Republic	0,030
Denmark	0,120
Finland	0,000
France	3,550
Germany	No data
Great Britain	<1,000
Greece	0,000
Hungary	0,020
Lithuania	
Luxemburg	0,000
Netherlands	0,060
Norway	0,380
Spain	0,086
Sweden	0,500
Switzerland	0,870
Romania	0,200
USA	69,000
Japan	0,152
South Africa	0,150

INTERESTING SITES ON THE INTERNET

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

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