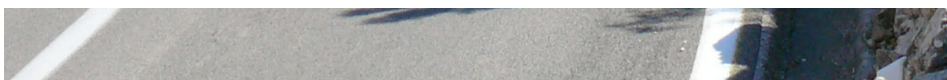




ASPHALT IN FIGURES

2011



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 2011.

Mr. Jean-Louis Marchand

President EAPA



KEY FIGURES OF THE EUROPEAN ASPHALT INDUSTRY IN 2011

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.

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

TOTAL PRODUCTION OF HOT AND WARM MIX ASPHALT IN 2006 - 2011

(in million tonnes)

Country	2006	2007	2008	2009	2010	2011
Austria	10,0	9,5	9,5	9,0	8,2	8,0
Belgium	5,0	4,5	4,9	4,7	4,8	5,9
Croatia	3,7	3,7*	4,2	3,2	2,7	2,6
Czech Republic	7,4	7,0	7,3	7,0	6,2	5,8
Denmark	3,4	3,3	3,1	2,7	3,2	4,0
Estonia	1,5	1,5	1,5	1,2	1,1	1,3
Finland	5,5	5,9	6,0	5,2	4,9	5,0
France	41,5	42,3	41,8	40,1	38,8	39,2
Germany	57,0	51,0	51,0	55,0	45,0	50,0
Great Britain	25,7	25,7	25,0	20,5	21,5	22,4
Greece	7,8	8,0	8,1	8,7	5,2	2,3
Hungary	4,4	3,3	2,5	1,6	3,4	2,3
Iceland	0,3	0,3	0,4	0,3	0,2	0,2
Ireland	3,5	3,3	2,8	3,3	2,3	1,8
Italy	44,3	39,9	36,5	34,9	29,0	28,0
Latvia	0,6*	0,6*	0,6*	0,6*	0,6*	0,6*
Lithuania		1,7	2,2	1,5	1,6	1,6
Luxembourg	0,6	0,6	0,6*	0,6	0,7	0,7
Netherlands	9,8	10,2	9,3	9,8	9,5	9,6
Norway	5,1	5,9	5,7	6,5	5,9	6,7
Poland	18,0	18,0*	15,0	18,0	18,0	26,5
Portugal	8,9	9,0	9,0*	9,0*	6,7	6,4
Romania	2,8*	3,2	3,3	3,6	3,2	3,6
Slovakia	2,2	2,2*	2,2*	2,2	1,9	2,2
Slovenia	2,2	2,1	2,6	2,3	1,8	1,3
Spain	43,4	49,9	42,3	39,0	34,4	29,3
Sweden	7,3	7,7	8,7	8,1	7,9	8,1
Switzerland	5,4	5,2	5,3	5,4	5,3	5,4
Turkey	18,9	22,2	26,6	23,1	35,3	43,5
Europe	346,1	347,7	338,0	317,3	309,3	324,3
Australia	7,7	9,0	9,5	9,5*	7,52	8,7
Japan	56,6	54,9	49,6	49,6	44,7	45,6
Ontario - Canada	13,0	13,2	13,2*	13,2*	14	13,5
U.S.A.	500	500	440	324	326	332
South Africa						5,7
South Korea				35,6	20,7	

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	48		52
Croatia	55	4	41
Czech Republic	60	17	23
Denmark	43	9	48
Estonia	70	0	30
Finland	95	0	5
Germany	30	19	51
Greece	75	15	10
Hungary	66	22	12
Iceland	95	5	
Italy	50	30	20
Lithuania	43	27	30
Luxembourg	38	58	4
Netherlands	37	9	54
Norway	80	10	10
Poland	48	32	20
Portugal	20	35	45
Romania	30	24	46
Slovakia	40	35	25
Slovenia	51	6	43
Spain	52	29	19
Sweden	45	15	40
Switzerland	23	23	54
Turkey	40	31	29
Japan	81	12	7
Ontario - Canada	60		40

SURFACE COURSES WITH ASPHALT CONCRETE EN 13108-1

Country	% of total annual hot and warm mix asphalt production in 2011	In 2011 applied area in million m ²	Total area in million m ² incl. 2011
Austria	19,0		
Belgium	33,2		
Croatia	53,0	13,4	
Czech Republic	54,0	23,5	
Denmark	26,7	15,0	
Estonia	55,0		
Finland	76,5		
Germany	20,0		
Greece	75,0	19,2	
Hungary	66,0	14,5	
Iceland	89,0	1,5	
Italy	42,5		
Lithuania	36,0		
Luxembourg	18,0	0,4	
Netherlands	18,3		
Poland	40,8		
Portugal	75,0	9,0	
Romania	8,0	3,6	
Slovakia	36,0		
Slovenia	49,0	11,7	
Spain	41,0		
Sweden	20,0	30,0	
Switzerland	14,0	3,9	
Turkey	37,0		
Japan		58,6	365

SURFACE COURSES WITH BBTM EN 13108-2

Country	% of total annual hot and warm mix asphalt production in 2011	In 2011 applied area in million m ²	Total area in million m ² incl. 2011
Austria	0,04		
Belgium	2,7	2,20	
Czech Republic	0,2	0,10	
Hungary	1,0	0,04	
Portugal	5,0	1,00	
Romania	8,0	2,50	
Spain	4,7		
Switzerland	2,0	1,05	23,3
Japan		0,17	2,9

SURFACE COURSES WITH SOFT ASPHALT EN 13108-3

Country	% of total annual hot and warm mix asphalt production in 2011	In 2011 applied area in million m ²	Total area in million m ² incl. 2011
Finland	13,9		
Sweden	5,0	10,00	

SURFACE COURSES WITH HOT ROLLED ASPHALT EN 13108-4

Country	% of total annual hot and warm mix asphalt production in 2011	In 2011 applied area in million m ²	Total area in million m ² incl. 2011
Portugal	5,00	6,00	
Romania	10,00	2,50	
Japan		0,004	1,76

SURFACE COURSES WITH POROUS ASPHALT EN13108-7

Country	% of total annual hot and warm mix asphalt production in 2011	In 2010 applied area in million m ²	Total area in million m ² incl. 2011
Belgium	0,40	0,21	
Czech Republic	0,20	0,20	
Denmark	0,23	0,17	2,50
Italy	5,00		100,0
Luxembourg	1,00	0,04	
Netherlands	9,20		
Portugal	5,00	5,00	
Slovenia	0,30		
Spain	0,50		
Sweden	<1	0,20	
Switzerland	7,00	1,75	27,7
Japan		4,10	3,73

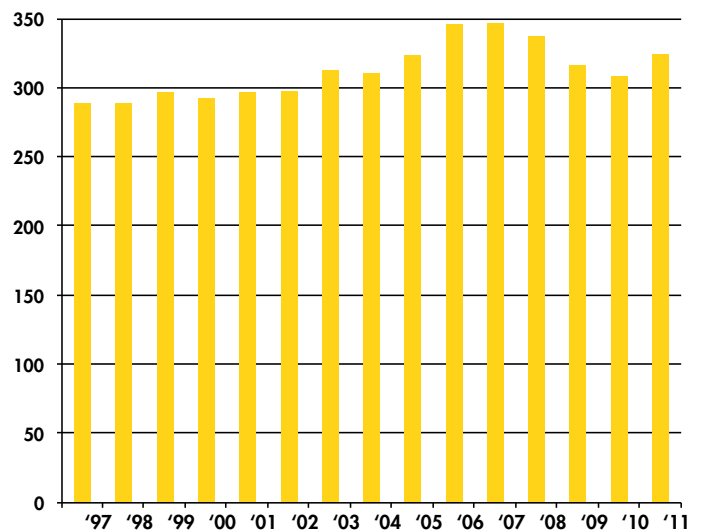
SURFACE COURSES WITH STONE MASTIC ASPHALT EN 13108-5

Country	% of total annual hot and warm mix asphalt production in 2011	In 2010 applied area in million m ²	Total area in million m ² incl. 2011
Austria	0,9		
Belgium	16,6	10,9	
Croatia	2,0	0,4	
Czech Republic	4,8	2,6	
Denmark	16,0	7,4	53,1
Estonia	8,0		
Finland	9,4		
Germany	9,0		
Hungary	6,0	1,5	
Iceland	6,0	0,1	
Italy	2,0		
Lithuania	7,0		
Luxembourg	19,0	0,4	
Netherlands	8,9		
Poland	6,7		
Portugal	3,0	5,0	
Romania	4,0	1,0	
Slovakia	4,0		
Slovenia	1,5	0,5	
Spain	5,8		
Sweden	15,0	15,0	
Turkey	3,0		
Japan		0,5	9,8

SURFACE COURSES WITH MASTIC ASPHALT EN13108-6

Country	% of total annual hot and warm mix asphalt production in 2011	In 2010 applied area in million m ²	Total area in million m ² incl. 2011
Austria	0,02		
Belgium	0,40		
Czech Republic	0,80	0,50	
Finland	0,20		
Germany	1,00		
Italy	0,50		
Hungary	1,00	0,03	
Netherlands	0,60		
Poland	0,50		
Portugal	7,00	11,00	
Slovenia	0,20		
Sweden	<1	0,20	
Switzerland	0,00		
Japan		0,23	6,10

TOTAL PRODUCTION OF HOT AND WARM MIX ASPHALT IN EUROPE (in million tonnes)



PRODUCTION OF WARM MIX ASPHALT IN 2011

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	2011 (million tonnes)
Austria	0,000
Croatia	0,000
Czech Republic	0,000
Estonia	0,000
Finland	0,690
France	1,259
Great Britain	<0,75
Greece	0,000
Hungary	0,002
Lithuania	0,060
Luxemburg	0,007
Netherlands	0,300
Norway	-
Portugal	0,000
Spain	0,000
Sweden	0,600
Switzerland	0,850
Romaina	0,126
Turkey	-
USA	70,600
Japan	0,111
Ontoria-Canada	0,600
South Africa	0,050

COLD BITUMINOUS MIXES (annual tonnage)

Country	2009 (tonnes)	2010 (tonnes)	2011 (tonnes)
Austria	20.000	10.000	20.000
Belgium	33.000	30.000	33.000
Croatia	0	30.000	21.000
Czech Republic	8.100	11.620	9.907
Denmark	0	≈ 0	≈ 0
France	> 1.500.000	> 1.500.000	1.600.000
Great Britain	< 1.000.000		
Hungary	0	0	40.000
Iceland	6.000		
Lithuania	0	61.936	59.950
Norway	5.000	9.000	37.000
Poland	60.000	61.000	
Portugal		130	110
Romania	13.000	22.000	13.000
Slovakia			3.000
Slovenia	5.000		
Spain	275.000	185.000	200.000
Sweden	90.000	70.000	60.000
Switzerland	560.000	630.000	740.000
Turkey	1.404.000	2.370.000	1.020.000
Japan		104000	95.000
Mexico	3.000.000	3300000	

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	550.000	90			5	5
Belgium	1.500.000	65				50
Czech Republic	1.500.000	14	0		35	15
Denmark	600.000	80				20
Finland	1.000.000					65
France	7.080.000	45				>30
Germany	14.000.000	84				16
Greece	0	0	0	0	0	0
Great Britain	4.500.000					
Hungary	64.882	100	0	0	0	0
Iceland	15.000				25	2,5
Ireland	100.000	40	0	0		2,0
Italy	11.000.000	20				
Luxembourg	190.000	95			5	80
Netherlands	4.000.000	83		15,00		71
Norway	726.000	18	-	0,00		62
Poland	~110.000	~4				~0,2
Portugal	2.000	60	0		5	15
Romania	13.000	60		12	15	5
Slovenia	10.000			30	20	50
Spain	1.350.000	73			10	17
Sweden	1.100.000	70		5	5	15
Switzerland	1.750.000	51	18		19	10
Turkey	2.809.000	23				77
Australia	438	5				73
Japan						73
U.S.A.	71.400.000	84				5
Ontoria-Canada	4.000.000	85				10

APPLICATION OF SLURRY SEAL AND MICRO-SURFACING/SURFACE DRESSING

(in million m²)

Country	SS&MS 2011	Trend '10/'11	SD 2011
Austria	0,50	<	
Croatia	0,65		
Czech Republic	1,00	=	1,10
Denmark	0,00	=	5,50
Finland		=	0,40
France	53,00	>	261,00
Greece	0,10	<	0,00
Hungary		<	0,01
Iceland	0,10	<	3,80
Lithuania	0,10	>>	4,10
Norway		=	1,50
Poland	0,95	>	2,90
Portugal	1,80	<	1,30
Romania	1,40		0,00
Slovenia	0,10	=	0,10
Spain	7,00	<<	
Sweden	2,00	>	10,00
Switzerland	0,36	=	0,37
Turkey			277,00
Japan	0,0004	<<	

CONSUMPTION OF BITUMEN IN THE ROAD INDUSTRY

(in million tonnes)

Country	Tonnage in 2011	% Modified bitumen (of total)			Emulsions in 2011
		in 2009	in 2010	in 2011	
Austria	0,55	30	35	25	0,004
Belgium	0,25	23	24,4	25,5	
Czech Republic	0,35	20	16	18	0,030
Denmark	0,20	5	5	5	0,021
Finland	0,29	0	0	0	0,009
France	3,06	<10	<10	<10	0,960
Germany	2,20	23			
Great Britain	1,35	8	8	8	0,105
Greece	0,12	2,9	2	2	0,003
Hungary	0,12	21	12	11	0,005
Iceland	0,02	0			0,005
Ireland	0,10	10	25		
Italy	1,45	12,5	13,3	14	0,060
Lithuania	0,09	13	18	14	0,010
Luxembourg	0,04		15	20	
Netherland	0,34				
Norway	0,37	10	13	15	0,001
Poland	1,75	24	22	21	0,105
Portugal	0,29		15	1,5	0,024
Romania	0,21	74	45	74	0,280
Slovakia	0,13			60	0,010
Slovenia	0,05	17		10	0,002
Spain	1,41	12,6	14,3	13,1	0,120
Sweden	0,40	5	6	6	0,040
Switzerland	0,27	11	12	10	
Turkey	2,60	2	4	8	0,067
Japan	1,75		19,6	22,1	0,091
Ontoria-Canada	1		15	25	
South Africa	0,43				0,150

COMPANIES IN THE ASPHALT INDUSTRY

Country	Production only	Production & Laying	Laying only
Austria		66	
Belgium	9	19	no data
Croatia		39	10
Czech Republic	19	27	>40
Denmark	0	8	~10
Estonia	1	5	5
Finland	0	10	15
France		30	>1000
Germany	260	150	3000
Great Britain	19	24	
Greece	~215	215	3
Hungary	1	28	18
Iceland	1	4	10
Ireland	20	20	30
Italy	30	570	>3000
Lithuania		21	
Luxembourg		3	
Netherlands		24	5
Norway	4	20	35
Poland	4	260	155
Portugal	10	16	60
Romania	10	15	>30
Slovakia	2	12	30
Slovenia	14	13	1
Spain	10	191	
Sweden	0	70	80
Switzerland	61	76	>340
Turkey		265	~75
Europe	690	2141	> 7952
Japan		741	
Ontario-Canada		46	100
South Africa	6	9	17

NUMBER OF PRODUCTION SITES

Country	Stationary Plants		Mobile plants		Number fit for hot recycling	
	2010	2011	2010	2011	2010	2011
Austria	114	112	1	1	65	80
Belgium	38	36	0	0	26	25
Croatia	57	52	1	3	5	5
Czech Republic	111	110	3	3	70	70
Denmark	42	42	3	3	40	40
Estonia	11	23	13	13	10	11
Finland ***	72	55	23	26	51	45
France **	436	437	72	69	>180	>200
Germany	652	648			625	622
Great Britain ***	270	250				
Greece ***	225	210	10	5	1	1
Hungary	78	73	5	5	0	39
Iceland ***	4	4	4	4		1
Ireland	45	40	4	0	6	5
Italy	640	640	10	10	300	300
Lithuania	39	37	1	1	22	24
Luxembourg	4	4			3	3
Netherlands	42	41	0	0	41	40
Norway	84	85	12	11	25	25
Poland	290	300	25	35	4	4
Portugal	25	25	30	25	12	15
Slovakia		54		0		22
Slovenia	16	14				
Spain	364	359	107	97	31	159
Sweden	83	85	11	10	70	75
Switzerland	141	143	1	2	68	75
Turkey ***	211	212	368	431	7	9
Europe	4094	4091	704	754	1662	1896
Japan	1189	1160	8	12	1009	996
Ontario - Canada	120	120	30	30	140	125
South Africa		27		22		31
USA****		-3500				

- ** 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

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.vbwasfalt.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.fav.net.....	Norwegian Asphalt and Road Contracting Association
www.pswna.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.asnud.org.tr.....	Turkish Asphalt Contractors Association
www.mineralsproducts.org.....	UK Minerals Products Association
www.amaac.org.mx.....	Asociacion Mexicana del Asfalto,A.C
www.sdruzeni-silnice.cz.....	Road Contractors Association Praha
www.galpenergia.com.....	Galp Energia Portugal
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.lakd.lt.....	Lithuanian Road Administration
www.irfnet.eu.....	European Union Road Federation
www.fehrl.org.....	European Road Research Laboratories
www.eota.be.....	European Organisation for Technical Approvals
www.eccredi.org.....	The European Council for Construction Research, Development and Innovation
www.cen.eu.....	European Committee for Standardization
www.fiec.org.....	European Contractors Organisation
www.ebrd.com.....	European Bank for Eastern Europe
www.eib.org.....	European Investment Bank
www.hotmix.org.....	US National Asphalt Pavement Association
www.aapa.asn.au.....	Australian Asphalt Pavement Association
www.asphaltinstitute.org.....	US Bitumen Organisation
www.ohmpa.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
www.inveas.org.ve.....	Venezuelan Asphalt Association
www.amaac.org.mx.....	Asociacion Mexicana del Asfalto,A.C



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