



EUROPEAN ASPHALT PAVEMENT ASSOCIATION

ASPHALT IN FIGURES

2009



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 2009.

Mr. Alan Mackenzie
President EAPA

Key figures of the European asphalt industry in 2009

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). All figures are in metric tonnes.

→ Total Production of Hot and Warm Mix Asphalt in 2004 - 2009 (in million tonnes)

Country	2004	2005	2006	2007	2008	2009
Austria	10,0	10,0	10,0	9,5	9,5	9,0
Belgium	4,9	5,2	5,0	4,5	4,9	4,7
Croatia	3,0	3,8	3,7	3,7*	4,2	3,2
Czech Republic	5,5	5,6	7,4	7,0	7,3	7,0
Denmark	3,6	3,2	3,4	3,3	3,1	2,7
Estonia	1,1	1,2	1,5	1,5	1,5	1,2
Finland	5,6	6,2	5,5	5,9	6,0	5,2
France	40,5	40,1	41,5	42,3	41,8	40,1
Germany	52,0	57,0	57,0	51,0	51,0	55,0
Great Britain	26,9	27,9	25,7	25,7	25,0	20,5
Greece	7,0	7,0*	7,8	8,0	8,1	8,7
Hungary	3,0	3,8	4,4	3,3	2,5	1,6
Iceland	0,3	0,3	0,3	0,3	0,4	0,3
Ireland	3,4	3,4	3,5	3,3	2,8	3,3
Italy	49,3	43,5	44,3	39,9	36,5	34,9
Latvia	0,6*	0,6*	0,6*	0,6*	0,6*	0,6*
Lithuania				1,7	2,2	1,5
Luxembourg			0,6	0,6	0,6*	0,6
Netherlands	7,9	8,6	9,8	10,2	9,3	9,8
Norway	4,5	5,1	5,1	5,9	5,7	6,5
Poland	12,7	15,0	18,0	18,0*	15,0	18,0
Portugal	9,5	11,1	8,9	9,0	9,0*	9,0*
Romania	2,8*	2,8*	2,8*	3,2	3,3	3,6
Slovakia	1,0	1,8	2,2	2,2*	2,2*	2,2
Slovenia	1,7	1,5	2,2	2,1	2,6	2,3
Spain	38,9	41,5	43,4	49,9	42,3	39,0
Sweden	6,8	7,2	7,3	7,7	8,7	8,1
Switzerland	4,6	4,7	5,4	5,2	5,3	5,4
Turkey	11,3	16,6	18,9	22,2	26,6	23,1
Europe	318,4	324,3	346,1	347,7	338,0	326,9
Australia	6,9	7,7	7,7	9,0	9,5	9,5*
Japan	60,2	57,3	56,6	54,9	49,6	49,6
New Zealand	0,8	0,9	0,9	0,9	0,9	0,9*
Ontario - Canada	11,0	13,0	13,0	13,2	13,2*	13,2*
U.S.A.	475,0	500,0	500,0	500,0	440,0	374,0
Mexico					25,0	
Venezuela	6,6	9,5	22,0		8,7	
Korea						35,6

→ Application in surface-, binder- and base courses in % of total annual HMA production

Country	Surface course	Binder course	Base course
Austria	20	15	65
Belgium	52		48
Croatia	51	8	41
Czech Republic	57	19	24
Denmark	50	7	43
Estonia	65	31	4
Finland	90		10
Germany	31	23	46
Greece	40	35	25
Hungary	62	34	4
Iceland	95	5	
Italy	50	30	20
Lithuania	30	33	37
Netherlands	36	4	60
Norway	80	10	10
Poland	48	32	20
Romania	32	26	42
Slovenia	53	6	41
Spain	51	28	21
Sweden	40	15	45
Switzerland	25	21	54
Turkey	35	38	27
Japan	80	13	7
Mexico	15	65	20

→ Surface courses with Asphalt Concrete - EN 13108-1

Country	% of total annual hot and warm mix asphalt production in 2009	In '09 applied area in million m ²	Total area in million m ² incl. 2009
Austria	18,9		
Belgium	34,4		
Croatia	47,0	1,5	
Czech Republic	51,5	27,0	
Denmark	24,0	7,6	
Estonia	61,0		
Finland	69,3		
Germany	18,0		
Greece	33,5	43,0	
Hungary	59,0		
Iceland	90,0	2,3	
Lithuania	74,0		
Netherlands	14,3		
Poland	43,2		
Romania	9,6	37,0	
Slovenia	93,0	16,7	
Spain	37,6	141,0	
Sweden	20,0	27,0	
Switzerland	12,0		
Turkey	33,0		
Japan		23,43	343,5

→ Surface courses with BTM - EN 13108-2

Country	% of total annual hot and warm mix asphalt production in 2009	In 2009 applied area in million m ²	Total area in million m ² incl. 2009
Belgium	2,5	1,74	
Czech Republic	0,2	0,20	
Greece	6,5	2,80	
Netherland	3,4		
Romania	8,0	28,00	
Spain	7,5	54,10	
Switzerland	4,0	1,10	2,1
Japan		0,15	2,4

→ Surface courses with Soft Asphalt - EN 13108-3

Country	% of total annual hot and warm mix asphalt production in 2009	In '09 applied area in million m ²	Total area in million m ² incl. 2009
Denmark	13,3	6,1	
Finland	13,5		
Sweden	8,0	11,0	

→ Surface courses with Hot Rolled Asphalt - EN 13108-4

Country	% of total annual hot and warm mix asphalt production in 2009	In 2009 applied area in million m ²	Total area in million m ² incl. 2009
Romania	9,60	23,00	
Japan		0,016	1,75

→ Surface courses with Stone Mastic Asphalt - EN 13108-5

Country	% of total annual hot and warm mix asphalt production in 2009	In 2009 applied area in million m ²	Total area in million m ² incl. 2009
Austria	1,1		
Belgium	14,2	8,1	
Croatia	4,0	1,5	
Czech Republic	4,2	2,7	
Denmark	11,9	3,7	39,3
Estonia	4,0		
Finland	6,3		
Germany	12,0		
Hungary	3,0		
Iceland	5,0	0,1	
Lithuania	26,0		
Netherlands	8,8		
Poland	4,3		
Romania	4,8	12,0	
Slovenia	6,0	1,3	
Spain	4,2	31,3	
Sweden	10,0	14,0	
Switzerland	0,0		
Turkey	2,0	4,2	8,2
Japan		0,7	8,6

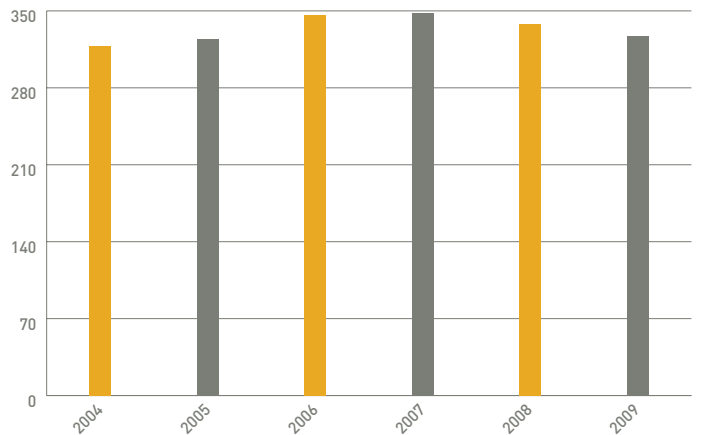
→ Surface courses with Mastic Asphalt - EN13108-6

Country	% of total annual hot and warm mix asphalt production in 2009	In 2009 applied area in million m ²	Total area in million m ² incl. 2009
Austria	0,02		
Belgium	0,40		
Czech Republic	0,90	0,90	
Finland	0,90		
France	0,50		
Germany	1,00		
Hungary	4,00		
Netherlands	1,00		
Poland	0,48		
Slovenia	0,40		
Sweden	< 1	0,20	
Switzerland	6,00	1,70	
Japan		0,14	6,0

→ Surface courses with Porous Asphalt - EN13108-7

Country	% of total annual hot and warm mix asphalt production in 2009	In 2009 applied area in million m ²	Total area in million m ² incl. 2009
Belgium	0,50	0,26	
Czech Republic	0,40	0,30	
Denmark	0,26	0,13	2,0
Netherlands	8,00		
Spain	1,70	8,90	
Sweden	< 1	0,20	
Switzerland	8,00	1,90	24,0
Italy			80,0
Japan	4,40	3,69	39,9

→ Total Production of Hot Mix Asphalt in Europe (in milion tonnes)



→ Cold Bituminous Mixes (annual tonnage)

Country	2007 (tonnes)	2008 (tonnes)	2009 (tonnes)
Austria	60 000	0	20 000
Belgium	29 000	29 500	33 000
Croatia		0	0
Czech Republic	5 500	26 400	8 100
Denmark	≈ 0	≈ 0	0
Estonia	0	0	0
France	> 1 900 000	> 2 000 000	> 1 500 000
Great Britain			< 1 000 000
Greece			0
Hungary	1 676	1 956	0
Iceland			6 000
Ireland	195 000	140 000	
Lithuania	112 000	75 000	0
Norway	9 000	79 000	5 000
Poland		58 000	60 000
Romania	22 000	18 000	13 000
Slovenia	≈ 0	0	5 000
Spain			275 000
Sweden	150 000	120 000	90 000
Switzerland			560 000
Turkey	1 288 000	3 546 000	1 404 000
Japan			104 000
Mexico		3 000 000	3 300 000

→ Production of Warm Mix Asphalt in 2009 (annual tonnage)

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	2009 (million tonnes)
Austria	0,000
Croatia	0,000
Czech Republic	0,050
Estonia	0,000
Finland	0,750
France	> 0,520
Great Britain	< 0,5
Greece	0,000
Hungary	0,000
Lithuania	0,000
Netherlands	0,200
Norway	≈ 0
Spain	1,500
Sweden	0,100
Switzerland	0,650
Romania	0,004
Japan	0,113
Mexico	0,050

→ Application of Slurry Seal and Micro-Surfacing/Surface Dressing in million m²

Country	SS&MS 2009	Trend '08/'09	SD 2009
Austria	0,500	>	
Croatia	0,212	>	
Czech Republic	1,200	=	1,50
Denmark	0,04	=	4,80
Estonia	0,000	<	11,60
Finland		=	0,30
France	25,000	<	< 300,00
Greece	0,250	>	0,00
Iceland	0,100	=	4,10
Norway		=	1,50
Poland	0,900	0	2,85
Romania	1,350	>	0,00
Sweden	0,300	=	7,00
Switzerland	0,390	=	0,39
Turkey		<	229,00
Japan	0,001	<	

→ 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	400 000	85		5	10	
Belgium	1 300 000	57				44
Czech Republic	1 500 000	20	0	30	30	10
Croatia	13 000			100		
Denmark	307 000	55	0	0	45	46
Finland	500 000					
France	7 053 000	41				6,8
Germany	14 000 000	82			18	60
Greece	0					
Great Britain	4 000 000					
Hungary	3 000	66			33	
Iceland	30 000				25	6,0
Ireland	100 000	30				1,0
Italy	12 000 000	20				
Netherlands	4 500 000	74				72
Norway	763 000	12	≈ 0	12	58	7,3
Poland	1 100 000	5				0,2
Romania	13 000	60	10	15	3	12
Slovenia	15 360	30	20	50		
Spain	1 850 000	52	9	15	24	9
Sweden	1 000 000	75	10	10	5	50
Switzerland	1 200 000	50		50		17
Turkey	1 069 600	3			97	1
Japan						70,7

→ Consumption of bitumen in the road industry (in million tonnes)

Country	Tonnage in 2009	% Modified bitumen (of total) in 2007	% Modified bitumen (of total) in 2008	% Modified bitumen (of total) in 2009	Emulsions in 2009
Austria	0,45			30	
Belgium	0,21	19	24	23	
Czech Republic	0,48	19	20	20	0,030
Denmark	0,14	5	5	5	0,015
Estonia	0,09	0	0	0	0,020
Finland	0,30			0	0,003
France	3,29	< 10	< 10	< 10	0,900
Germany	2,40	23	22,5	23	
Great Britain	1,25	7,0	7,0	8	0,100
Greece	0,37			2,9	0,008
Hungary	0,82	25	38,7	21	0,002
Iceland	0,03			0	0,005
Ireland	0,20	10,8	11,2	10	0,030
Italy	1,80			12,5	0,077
Lithuania	0,09		7	13	0,005
Netherlands	0,37	3	7		0,030
Norway	0,34	≈ 0	≈ 0	10	0,004
Poland	1,40		21	24	1,200
Romania	0,21	65	70	74	0,260
Slovenia	0,09	15	22	17	0,001
Spain	1,74			12,6	0,195
Sweden	0,50	3	4	5	0,040
Switzerland	0,28			11	
Turkey	2,00	1,3	1,4	2	0,033
Japan	0,97			19,6	0,108
Mexico	2,09			0,24	0,660

→ Companies in the asphalt industry

Country	Production only	Production & Laying	Laying only
Austria		60	
Belgium	10	19	> 40
Croatia		35	10
Czech Republic	18	27	> 40
Denmark	0	8	≈ 10
Estonia	1	9	5
Finland	0	10	15
France	0	30	> 1000
Germany	260	150	3 000
Great Britain	25	20	
Greece	≈ 245	245	10
Hungary	1	4	2
Iceland		5	14
Ireland	2	22	40
Italy	30	570	> 3500
Latvia			
Lithuania		22	
Luxembourg	0	3	0
Netherlands	0	19	15
Norway	4	16	35
Poland	4	255	140
Romania	12	25	> 20
Slovakia			
Slovenia	16	14	5
Spain	18	204	4
Sweden	0	7	75
Switzerland	57	69	> 310
Turkey	14	181	74
Europe	713	2033	> 8364
Mexico			
Japan		770	

→ Number of Production Sites

Country	Stationary Plants		Mobile plants		Number fit for hot recycling	
	2008	2009	2008	2009	2008	2009
Austria	116	115	1	1	40	42
Belgium	40	38	0	0	23	23
Croatia	52	52	2	2	4	
Czech Republic	110	112	3	3	70	70
Denmark	42	42	3	3	40	40
Estonia	10	11	15	12	6	9
Finland ***	64	61	25	39	44	46
France **	434	435	79	76	>150	>180
Germany	665	666			620	640
Great Britain ***	300	290				
Greece ***	≈ 240	≈ 235	≈ 10	≈ 10	0	1
Hungary	97	34	11	5	42	0
Iceland ***	4	4	5	4	1	
Ireland	58	45	15	3	15	4
Italy	630	640	10	10	280	300
Latvia**	18*	18*	1*	1*		
Lithuania	39	40	1	1	21	22
Luxembourg**	4	4	0	0	2	2
Netherlands	45	44	0	1	45	43
Norway	82	87	14	12	20	25
Poland*	280	295	20	22	2	3
Portugal	15*	15*	110	110*	20*	20*
Slovakia*	41*	41*			9*	9*
Slovenia	19	19	2	2		
Spain	379	375	104	107	29	31
Sweden	83	83	13	11	65	65
Switzerland	139	140	1	1	60	60
Turkey ***	214	218	301	359	5	7
Europe	4220	4159	746	795	1613	> 1642
Australia ***	135		35		40	
Japan	1205	1189	5	8	1018	1009
New Zealand	39					some
Venezuela ***	215		85		5	

** 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

→ 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.infrary.fi Finnish Asphalt Association
www.usirf.com French Asphalt Pavement Association
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.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.saaav.sk Slovakian Asphalt Pavement Association
www.zdruzenje-zas.si Slovenian Asphalt Pavement Association
www.asefma.es Spanish Asphalt Association
www.asmdp.org.tr Turkish Asphalt Contractors Association
www.mineralsproducts.org UK Minerals Products Association
www.amaac.org.mx Asociacion Mexicana del Asfaltto, A.C
<http://www.sdruzeni-silnice.cz/> Road Contractors Association Praha
www.galpenegria.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.lra.lt Lithuanian Road Administration
www.eurobitume.eu European Bitumen Association
www.oecd.org/cem World Economic Organisation
www.piarc.org/en/ World Road Congress
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 Asfaltto, A.C

→ EUROPEAN ASPHALT PAVEMENT ASSOCIATION

Rue du Commerce, 77
1040 Brussels - Belgium

Tel: +32 2 502.58.88
Fax: +32 2 502.23.58

www.eapa.org
info@eapa.org



EUROPEAN ASPHALT PAVEMENT ASSOCIATION