PIARC International Seminar in New Delhi, India 17-19 February 2011 Strategic Theme A1 - Reducing the Carbon Footprint in Road Construction Presentation of the Seminar Programme						
Theme 1	Kamlesh Kumar - Chief Engineer Government of India	Development of Road Infrastructure in India	Ministry 17.02.11.ppt			
Theme 2	Fei Den & Arnab Bandyopadhyay - The World Bank	Review of a Toolkit for GHG Emissions Mitigation in Road Construction and Rehabilitation in East Asian Developing Countries	Arnab Bandyopadhyay.pptx			
	<b>Simon Price -</b> Chair Technical Committee A1 - Director for Sustainability, Gifford LLP.	A Review of Worldwide Road Construction Carbon Accounting Practices and Outstanding Challenges	Simon Price.ppt			
	Sunil Kumar - Road Construction Department, Bihar	IMPACT OF HIGHWAY WIDENING ON CARBON FOOT PRINT	Sumil Kumar Chaudhary.ppt			
	Susanna Zammataro, Deputy Director General - IRF Geneva	CHANGER The IRF GHG Calculator for Assessing Emissions in Road Construction	Susanna Zammataro.ppt			
Theme 3	Dr P. K. Nanda - Intercontinental Consultants and Technocrats Pvt. Ltd.	Carbon Footprint in Road Construction – A Comparative Study	Dr.P.K NandaCarbon footprint in road construction.pptx			
	Dr Agnès Jullien - IFSTTAR	Theme 3: Road design for deacreasing the carbon footprint. "Envirnmental assessment of road pavements - the French experience"	Jullien_road_design(theme 3).pdf			
	Jean-François Corté - Secretary General - World Road Association	Applying the concept of sustainable development to the construction of new pavements and optimization of subgrade and pavement design	SeminarA1-Delhi-JFCorte'.ppt			
	Supriyo Choudhary - Strata Geosystems (India) Pvt.Ltd, Mumbai	"StrataWeb" Geocells – The Product and its Applications	Supriyo Choudhary IRC trataweb Geocells- presentation 170211.ppt			
	Dr Sunil Bose, Ambika Behl, Girish Sharma, Gajendra Kumar - Central Road Research Institute	Warm mix asphalt	Ambika Behl.pptx			
	Etienne le Bouteiller, Executive Director & A.S Prabhakar - IBEF	Bitumen Emulsions and the Environment	Bouteiller Bitumen emilsions and the environment.pptx			
	Jean Beauverd - Colas Suisse S.A	HT Thermal Solar	J.Beaverd.ppt			
Theme 4	Jacques Bonvallet, Blesson Varghese - FAYAT	Warm mix asphalt - Production of low-energy asphalt with continuous and/or batch mix production plants	JB Delhi FEB2011 Warm mixes.ppt			

	Ron Stover - Vice Precident, Asia Pacific Speciality Chemical				
	Devision	INTRODUCTION TO WARM MIX ASPHALT (WMA)	Mr Ron Stover MWV Reducing Carbon Footprint		
	Sanjay Deori - Central Road Research Institute	Indian Experiences on Microsurfacing : An Innovative Technology for Reduction of Greenhouse Gas Emissions	Sanjay Deori Microsurfacing.pptx		
	Ferhat Hammoum - IFSTTAR	WMA a new coating method to give the same performances as HMA, but with low temperature	WMA Piarc Seminar-IFSTTAE HammoumV2.ppt		
	Joyanta Maity, Dr B.C Chattonpadhay - Meghnad saha Institute of Technology, Kolkata & Dr S.P Mukhejee - Jadavpur University, Kolkata	Application of geo-naturals in Highway construction for mitigation of carbon footprint	(Joyanta Maity) Mitigation of carbon foot print in road const. Presentation.ppt		
	Dr.S.Gangopadhyay,Prof.Asit Baran Mandal, Prof.Devadas Manoharan, Dr.C.Rose, Dr.U.Mani, C.Kamaraj - CSIR	SUSTAINABLE BLENDED CEMENT FOR REDUCTION OF CARBON FOOT PRINT: DERIVATIVE FROM TANNERY FLESHING AS A CONSTITUENT MATERIAL FOR ROAD CONSTRUCTION	C.Kamraj.pptx		
Theme 5	Dr Agnes Jullien, Adiran Capony, Michel Dauvergne, Tristan Lorino, Bogdan Muresan Paslaru - IFSTTAR	Theme 5: Use of local materials, Earthworks & Environment - a road case study	Capony_JULLIEN_materials(theme5).pdf		
	Stephan Bernhard - EGIS		Delhi 2011- BERNHARD-v2.ppt		
	Michael Kedam - i-Tech-India	Use of Local Materials Local Soil, Recycled Materials, Reduced Cost, Shorter Project Completion Times Application of the Vetiver system: Approach to a green	Reducing carbon footprint in road construction 2.ppt Shantanoo bhattacharya Application of the Vetiver		
	Shantanoo Bhattacharya, Executive Engineer - PWD, Assam	road	system IRC.ppt		
	James Pappas - Delaware DOT- AAHSTO	"Use of Local Materials"	themes 5 (Jim pappas).ppt		
	Keith Rogers - ASI solutions PLC	Asphalt Preservation as a Means of Reducing Carbon Footprint in the Road Construction Industry	IRC Conference Feb 2011 final (Keith Rogers).ppt		
Thomas O	Er M C T PAREVA - Public Works Department, Govt of Delhi	Hot-In-Situ Recycling of Bituminous Roads In Delhi A Case Study	Hot-In-Situ Recycling of Bituminous Roads In Delhi A Case Study.pptx		
Theme 6	Jacques Bonvallet, Blesson Varghese - FAYAT	Typology of hot mix and warm mix recycling solutions in batch mix and continuous production plants	JB Delhi FEB2011 Recycling.ppt		
	Mike Savonis, FHWA	The Benefits of Reclaimed Materials	Savonis_Reclaimed_Materials presentation.ppt		
Panel discussion	Simon Price, Chair Technical Committee A1 - Director for Sustainability, Gifford LLP.	Simon Price Green Contracts&.ppt	Simon Price Green Contracts&.ppt		
Corresponding Papers					
Theme	Name of paper	Name of pdf. file	Author		

	Review of a Toolkit for GHG Emissions Mitigation in Road		
Theme 2	Construction and Rehabilitation in East Asian Developing		Fei Deng, Geoffrey Kungar, Deng Wang - The
	Countries	2-3.pdf	World bank
	Green house gas from road project "Improvement of Gomti		Dr P.K Nanda, ashutosh Chandwar, B.K Sahu -
	Beawar section NH 8" - a case study	2-4.pdf	IL&FS, TNL & ICT Pvt Ltd
	Determening the carbon footprint on road works with life cycle		Johanne Hammervold and Helge Bratteb -
	assessment methodology	2-5.pdf	Norweigan University of Science and Technology
			Sunil Kumar Chaudhary - Road construction deptt.
	Impact of Highway widening on carbon foot print	2-6.pdf	Patna
			Pooja Mistry & Sandrip Mistry - Dharmsinh Desai
	Determination of the carbon footprint on road work	2-7.pdf	University
	Carbon footprint in road construction a comparartive study of		
	alternate constructions	3-1.pdf	Dr.P.K Nanda, Madhava Reddy N - ICT Pvt Ltd
	Applying the concept of sustainable development to the		
	construction of new pavements and optimization of subgrade		
	and pavement design	3-2.pdf	Jean-François Corté - World Road Association
Theme 3	Envirnmental assessment of road pavements - the French		
Theme 5	experience	3-3.pdf	Dr Agnès Jullien - IFSTTAR
	Imperative of chemical admixtures and mineral additives in		
	pavement construction	3-4.pdf	Indrase Singh - NICMAR
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	StrataWeb Geocells: A three dimensional cellular confinement		Orangia Oliverally and Oliverando Orangia Decision
	system for reduction of carbon footprint in road constructions	3-5.pdf	Suprio Choudhury - Strataweb Geosystems Pvt Lto
	Warm mix asphalt - paving towards a greener future	4.1.pdf	M. von Deviere, R. Junhold - Aspha-min Gmbtt
			Tejash Gandhi, Everett Crews - MWV Specialty
	Warm mix asphalt by adding synthetic zeolite	4.2.pdf	Chemicals
	Warm mix asphalt - Production of low-energy asphalt with		Jacques Bonvallet - FAYAT,
	continuous and/or batch mix production plants	4.3.pdf	Blesson Varghese - Marini
	High temerature solar thermal energy for asphalts plants	4.4.pdf	Pierre Bornet, Marc Maranzana - Colas suisse
	Indian experiences on microsurfacing: an innovative technology		Sanjay Deori, BM Sharma, Yv Rao, S
	for reduction of green house gas emission	4.5.pdf	Gangopadhyay - CRRI
			Sunil Rose, Ambika Behl, Girish Sharma,
	Warm bituminous mixes: road to sustainable development	4.6.pdf	Gajendra Kumar - CRRI
Theme 4	Economic analysis of Soyaben based asphalt polymer for		Abhishek Mittal, Dr Sunil Bose, Gajendra Kumar
	preventive maintenance of roads	4.7.pdf	Girish Sharma - Central Road Research Institute
			Swapan Kumar Bagui - Student at the Bengal
	Rewiev of warm mix asphalt	4.8 pdf	enineering Science and Technology University
	Utilization of waste foundry sand for eco-friendly road		KAKalahan Osumu tek baha ba
	construction	4.9 pdf	K A Kolekar - Government Polytechnic
	Chemical warm mix additive for enhanced property	4.10 pdf	Logaraj Sundaram - Akzo Nobel
	Reduction of carbon footprint by using WMA in highways	4.4.4 pdf	Dekeeh Kumer, Dood Construction Doott
	sectors	4.11 pdf	Rakesh Kumar - Road Construction Deptt
	I Itilization of natural fibra in atoma matrix conholt	4 12 pdf	Arpita Suchismita, Mahabir Panda, Ujjal Chattara
	Utilization of natural fibre in stone matrix asphalt	4.12 pdf	- National Institue of Technology

	Development of sustainable roads with emulsion based cold		
	mix high rainfall areas	4.13 pdf	NKS Pundhir - CRRI
	Main road RN7 between La Pacaudiére and Changy (Loire,		
	France): a high performance treated capping layer at the limit of		
	the specifications	5.1. pdf	S Bernhard - Egis Route, X Fayoux - DREAL
	·		S Gangopayay, U Mani, C Kamaraj - Central
			research Institute,
			Asit Baran Mandal, C Rose - Central Leather
	Sustainable blended cement for reduction of carbon foot print		Research Institute,
	derived from leather fleshing as constituent material for road		Devadas Manharan - Anna University of
	construction	5.3. pdf	Technology
			Jim Pappas - Delaware Department of
	Use of local materials - state of practise in USA	5.4.pdf	transportation
	An enzyme based solution for reducing the carbon footprint in	0.4.94	
	road construction in India	5.5.pdf	Alon Globus, Michael Kedam - I-Tec India
		5.5.pdi	Joyanta Maity, BC Chattopadhyay - Meghnad
Theme 5	Application of geo-naturals in highway construction for		Saha Instutute of Technology,
	mitigation of carbon footprint	E 6 odf	SP Mukherejee - Jadavpur University
	Aplication of vetiver grass for erosion control: approach to a	5.6.pdf	Shantanoo Bhattachararyya - Eastern Vetiver
	green road	5.7.pdf	Network India AK Raji, V Sudha - NSS College of Enineering, KK
	Cubarada atabilization through application of lines aludae		
	Subgrade stabilization through application of lime sludge	5.8.pdf	Babu - Jawharlal Institute of Technology
	Carbon footprint in road construction- a case study for jute		Tenebrete Censel Ministry of testilog. Centerline
	geotextiles	5.9.pdf	Tapobrata Sanyal - Ministry of textiles, Gov India AK Raji, V Sudha - NSS College of Enineering, Kk
	Use of alternate materials for aggregates in bitumious road		•
	construction - a technique for reducing carbon footprint	5.10.pdf	Babu - Jawharlal Institute of Technology
	Use of innovative soil stabilizer and pavement material for		Anakul Saxen - Alchemist Technology Ltd,
	reducing carbon footprint	5.11.pdf	Satander Kumar - CRRI
			VG Havanagi, AK Sinha, S Mathur - Central Road
	Construction of embankment using copper slag waste material	5.12.pdf	Research Institute
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	Hot in situ recycling of bituminous roads in Delhi - a case study		MCT Pareva - Public works deptt, Gov of India
	Saving non renewable resources using recycling processes	6.2.pdf	Etienne Le Bouteiller - COLAS S.A
Theme 6	Typology of hot miw and warm mix recycling solutions in batch		Jacques Bonvallet - FAYAT,
	mix and continous production plants	6.3.pdf	Blesson Varghese - Marini
	Asphalt preservations as a means of reducing carbon footprint		
	on road construction industry	6.4.pdf	Keith Rogers - ASI Solution Plc.
			Prtihvi Singh Kandhal - National Center of Asphal
	Reducing carbon footprint through recycling asphalt pavements	6.5.pdf	Technology, Auburn University Alabama
			R Vasudevan, A Ramalinga, B Sundarakannan,
	A technique to dispose waste plastics in an ecofriendly way -		vekennedy - Deptt of Chemistry, College of
	application in construction of flexible pavement	6.6.pdf	Engineering