

## Accelerating Electromobility in the UK and Singapore: a shared challenge

## Carlton Hotel, Singapore April 17-19

## Symposium Programme

## **Registration Link**

Time	Session Topic / Moderator	Speakers	Format
Day 1			
09.00 - 10.00	Opening Remarks Tim Rockell (MC)	Kara Owen CMG British High Commissioner to Singapore	Context and high-level overview
		Rt Hon Jesse Norman UK Minister of State for Transport Video presentation Natalie Black HM Trade Commissioner APAC UK Government Professor Richard Davies Newcastle University Pro Vice- Chancellor Global and Sustainability	
10.00-11.00	Trends in electrification of transport MC	Colin Herron Professor of Practice Newcastle University Niels De Boer COO Future Mobility Solutions Energy Research Institute@NTU Bicky Bhangu President APCA Region Rolls Royce Min Yih Tan SVP Global Mobility Network Shell	Panel Q&A *A review of progress in transport electrification *The policy context *Challenges and successes *Strategies and future directions *Trends and targets
11.00 - 11.30	Break		



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11.30-12.30	Modelling EV networks in the UK and Singapore MC	Colin Herron Professor of Practice Newcastle University Muhamad Azfar Ramil Deputy Department Director A*STAR Tobias Massier Principal Scientist Technical University of Munich Create Singapore Yangfang Helen Zhou Assoc Professor Operations Management Singapore Management University	15-minute presentations *Models for setting up charging networks (Singapore and UK) *Locations and customer usage *Use of existing data (UK) and forecasting ahead *Types of charging networks *Predictions as charging networks evolve
12.30-13.30	Lunch		
13.30- 14.30	Implementing EV charging networks Colin Herron	Carl Perrin Professor and CEO, Institute for Clean Growth and Future Mobility Coventry University Freddie Chew General Manager ComfortDelGro ENGIE Arjun Raju KS Head of E-Mobility APAC SIEMENS Smart Infrastructure Singapore Darren Teoh Vice President CapitaLand Investment	Panel Q&A *Planning and locating charging networks from an industry perspective *Optimising usage of charging stations *Charging networks for consumers and fleets *Consumer trends *Incentivising uptake of EV's *Business investment and commercial sustainability of charging networks.
14.30 - 15.30	Infrastructure for Electromobility Phil Blythe	Goh Chee Kiong CEO Charge+ Yan Xu Assoc Professor NTU Akshay Rathore Professor, Engineering Singapore Institute of Technology Monica Huang Technical Principal Envision Digital	Panel Q&A *The challenges (and successes) in setting up infrastructure for EV charging stations *The research and implementation work required to set up and manage energy supplies for EV charging



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			*Demand and supply of power for EV's *The Singapore context for rolling out charging networks *Standardisation and compatibility of different charging outlets *The policy and technical challenges ahead
15.30-16.00	Break		
16.00 -17.15	Research and Business Case studies MC	Farzaneh Farhadi Researcher Intelligent Transport Systems Newcastle UniversitySafak Bayram Research Fellow Strathclyde UniversityRichard Chin General Manager StridesDavid Goh Head of Hyundai Cradle SingaporeNicholas Tey Enterprise Singapore	15-minute presentations *Newcastle: using data to optimise clean air zones and charging infrastructure *Strathclyde: statistical analysis of 12,000 charging stations in the UK *Strides: case study of EV taxis *Hyundai: business context; customer demands and innovations; smart mobility *Enterprise Singapore: the electromobility business ecosystem in Singapore
17.15-17.30	Roundup MC	Josey Wardle EV Infrastructure Lead Innovate UK Colin Herron Professor of Practice Newcastle University	
18.15-20.15	Reception	Harry's @ Chimes	

TimeSession TopicSpeakersFo	Format
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Day 2			
	Linhan Mahilitur	Dhil Dhithe	
09.00 - 10.00	Urban Mobility	Phil Blythe	15-minute
	and Innovation	Professor of Intelligent	presentations
		Transport Systems	
		Newcastle University	*Transport policy
		Josey Wardle	*Future urban mobility
	MC	EV Infrastructure Lead	*Trends in urban
		Innovate UK	planning
		Singapore business	*Research and
		representative	innovations
		Michael Chadney	*Policy and technical
		Senior Transport Planner	challenges
		Arup Singapore	_
10.00-10.30	Break		
10.30-11.00	AV Technology	Niels De Boer	15-minute
	and Policy	COO Future Mobility Solutions	presentations
		Energy Research	
		Institute@NTU	*The role of AV in
	Josey Wardle	Phil Blythe	electromobility
		Professor of Intelligent	*Autonomous and
		Transport Systems	intelligent transport
		Newcastle University	systems
		,	*The policy, legal and
			cultural aspects of AV
11.00 - 12.00	The role of AV in	Niels De Boer	Panel Q&A
	Electromobility	COO Future Mobility Solutions	
	Liectronicomity	Energy Research	*The connection
	Tan Teck Lee (IET)	Institute@NTU	between AV's and EV's
			*The role of AV's in
		Samuel Layton	
		Head of Singapore Operations	intelligent and
		Aurrigo	sustainable transport
		Jeannie Lee	systems
		Deputy Director	*The impact of AV's on
		Centre for Immersification SIT	consumer travel habits
		Malika Meghjani	and transport systems
		Assistant Professor	*The impact of AV's
		SUTD	systems on energy
			demand
			*The challenges of
			setting up AV
			infrastructure
			*The policy and
			technical challenges
			ahead
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12.00-13.00	Lunch		
13.00-13.15	EV Energy Supply UK Case Study	Josey Wardle EV Infrastructure Lead Innovate UK	15-minute presentation
13.15-14.30	Infrastructure, technology and alternative fuels MC	Phil Blythe Professor of Intelligent Transport Systems Newcastle University Peng Xiaoyang R&D Programme Manager Engie Lab Wang Zhenglin Head, Marketing and Partnerships Keppel Infrastructure Sandeep Hadap Regional Sales Manager (Asia) SIEMENS Energy Singapore	Q&A Panel *Energy systems and sources for electric transport *Modelling, supply and demand for energy *Powering heavy transport: buses and freight * Innovations and smart systems *Future trends
14.30-14.45	Break		
14.45- 15.45	EV's, fleets and the business context	Alistair Scott Managing Director APAC Jaguar and Land Rover Chen Xinwei	Panel Q&A *Demand and supply of electric vehicles
	Colin Herron	Deputy General Manager Strides Wong Zhonghao Product / Sales Manager Wearnes Automotive Patrick Wong Country Manager GoGoX	*EV range and future capabilities *EV taxi fleets *The business case for investing in fleet EV's *Logistics and smart systems for deliveries and route optimisation *Maintenance and reliability of charging systems
15.45-17.00	Fleets and Logistics Case Studies	Shruti Rathore Senior Strategy Consultant Arup Tom Shanks CFO	15-minute presentations *Arup: case study from the UK



	MC	Blue Line	*Blue Line: the business
		Lewis Hunter	case for electrifying a
		Research Fellow	taxi fleet
		Strathclyde University	*Strathclyde: public EV
		Aval Singh	smart charging
		Engineer, Intelligent Fleet	*Continental: smart
		Continental Corporation	systems to manage
		Kelvin Ng	fleet vehicles
		Business Development	*PTV: EV project in
		PTV Group Singapore	Singapore
17.00-17.15	Roundup	Phil Blythe	
		Professor of Intelligent	
		Transport Systems	
		Newcastle University	
		Colin Herron	
		Professor of Practice	
		Newcastle University	

Time	Session Topic	Speakers	Format
Day 3			
09.00 - 10.15	Next generation	Clive Ford	15-minute presentations
	EV technologies	Innovation Lead	
		A*STAR	*Battery use in
			electromobility
	Simon Lambert		*Charging capabilities
		Amit Gupta	*Alternative materials
		Head of Rolls Royce Electric	*Energy storage and use
		Singapore	of batteries
		Gavin Harper	
		Research Fellow	
		Birmingham University	
		Rohit Bhagat	
		Professor and CEO, Institute for	
		Clean Growth and Future	
		Mobility	
		Coventry University	
		David Hunter	
		Advanced Electric Machines	
10.15-10.30	Break		
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10.30-11.30	Emerging battery	Ho Choon Lim	Panel Q&A
(parallel	technology	Deputy Group Manager A*STAR	
session)		ΑΞΣΙΑΚ	



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	Viktor Dancza (IET)	Arjun Bhatterai Chief Technology Officer V-Flow Tech Alex Yan Professor of Engineering	*Developments in battery technology *Battery materials and processes *Deployment of batteries in electromobility settings
		NTU Elsa Feng Assistant Professor Singapore Institute of Technology	*Battery recycling and circular economy of batteries
10.30-11.30 (parallel session)	Modelling, data and EV networks	Colin Herron Professor of Practice Newcastle University	Panel Q&A *Data collection and
	Phil Blythe	Tom Shanks CFO Blue Line Lewis Hunter	modelling for EV networks *Using data for intelligent decision-
		Research Fellow University of Strathclyde Eng Yew Yeoh	making for EV networks *EV charging standards and circularity
		Director Regional Institute for Sustainability and Energy Transition	
11.30-12.45	Reimagining the	Bureau Veritas Rohit Bhagat	Panel Q&A
(parallel	battery for the	Professor and CEO, Institute for	
session)	circular economy	Clean Growth and Future Mobility	*Battery sustainability *Recycling
	Simon Lambert	Coventry University Gavin Harper Research Fellow Birmingham University Bryan Oh CEO	*Circular economy for batteries *Sourcing battery materials sustainably
		NEU Battery Material Song Ziyou Assis Professor NUS	
		Lidija Siller Professor Nanoscale Science Newcastle University	
11.30-12.45	Grid to charging	Josey Wardle	Panel Q&A
(parallel session)	stations	EV Infrastructure Lead Innovate UK	
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	Colin Herron	Parikshit Yadav Co-Founder Wired Box Company Wenyi Chew Business Development Keppel Volt Peter Gettinby Land Director RSK Kelvin Ng Business Development PTV Group	*Innovations in charging networks *Charging speeds *Connecting grids to charging networks *Energy efficiency *Technical challenges	
12.45-13.45	Lunch			
13.45-14.430	Recycling and Reuse Case Studies	Aaron Wee VP Investments and Strategy ACE Green Recycling	15-minute presentations *ACE Green Recycling: case study in disposing	
	Rohit Bhagat	Douglas Duncan Head Strategic Development Durapower Tan Kai Liang Section Manager A*STAR Simon Lambert and Gavin	of batteries *Durapower: technologies in battery recycling *Newcastle / Coventry: case study from the UK. *A*STAR Towards	
		Harper Senior Lecturer / Research Fellow Newcastle University / Birmingham University	automated battery disassembly	
14.45-15.15	Break			
15.15-16.15	Training and Skills Case studies	Industry (TBC) Carl Perrin CEO, Institute for Clean Growth	15-minute presentations *Case studies in training	
	МС	and Future Mobility Coventry University ITE Representative	from ITE and Coventry University	
16.15-17.15	Training and skills Colin Herron	Quek Yang Thee Programme Chair Republic Polytechnic Goh Say Seng Deputy Director (Technology Development)	Panel Q&A *Future workforce skills: skills needed for electromobility *Professional training	

