

**Transport Planning Society  
Decarbonising Transport**

**Paul Walker**

**Head of Strategic Development  
Go South Coast**

We're part of The

**Go Ahead**

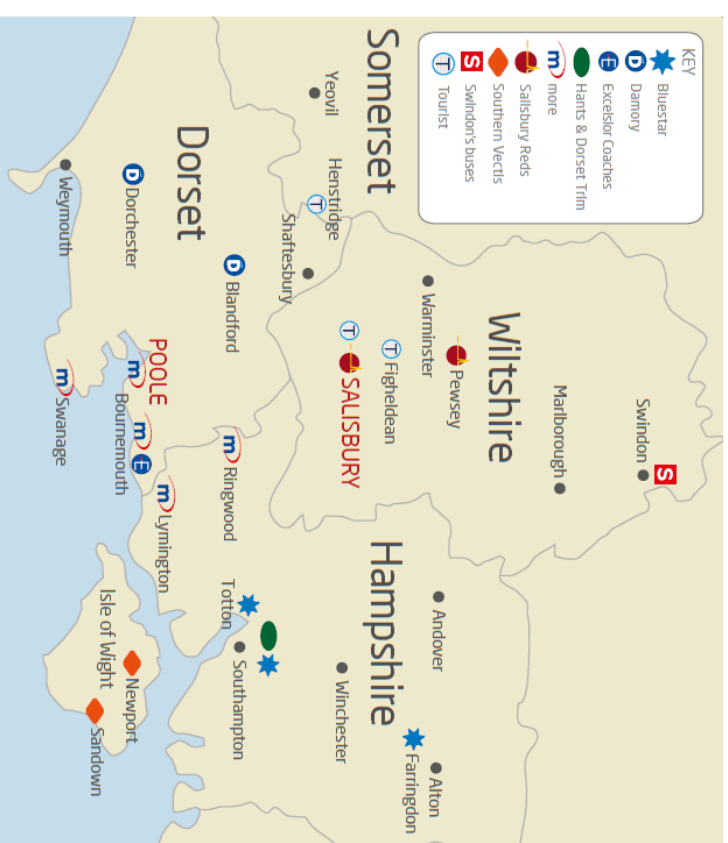
Group

the go south coast family of companies is



# Who Are We?

- Bluestar – Southampton
- Damory – rural Dorset
- morebus – Bournemouth & Poole
- Salisbury Reds – Salisbury
- Southern Vectis – Isle of Wight
- Swindon's Bus Company – Swindon
- Unilink – University of Southampton
- UNIBUS – Bournemouth University





## **Key Areas:-**

- **Decarbonising Buses and How to Deliver this**
- **Decarbonising New Development – Where the Planning White Paper Fails...**
- **Decarbonisation in a COVID context**





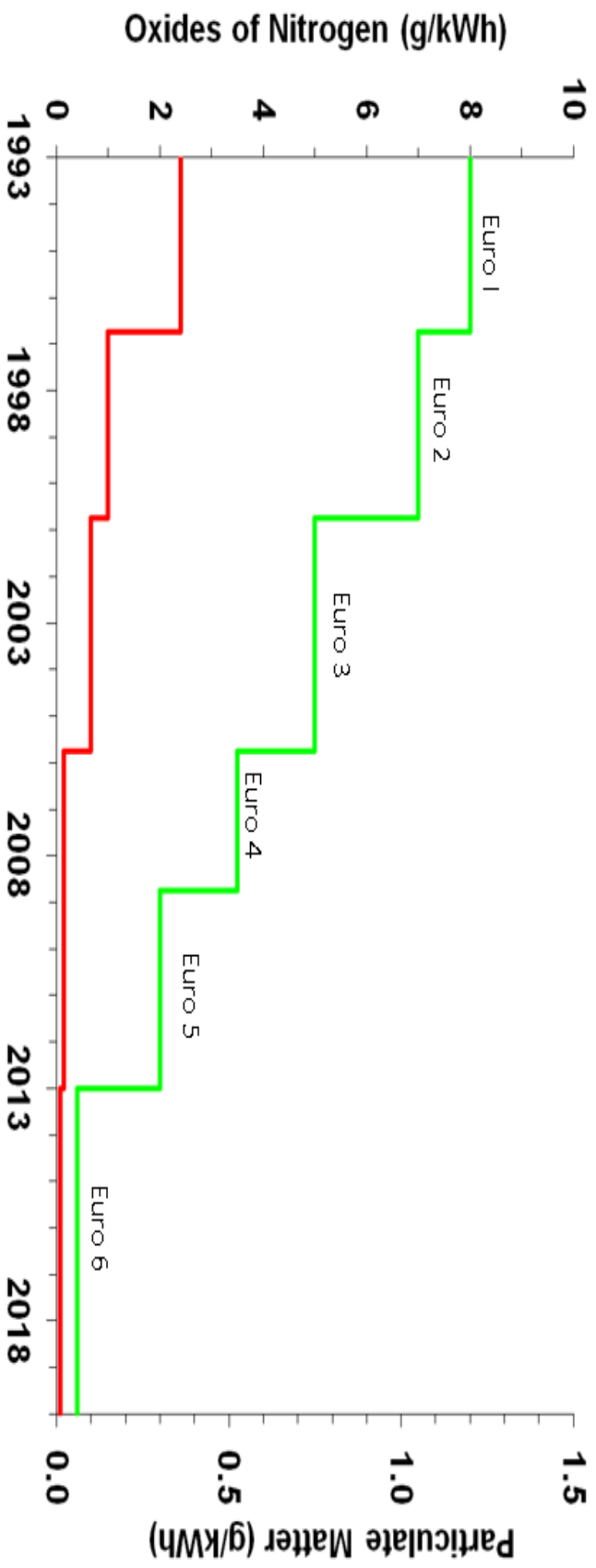


**GO GREEN**  
GO CLEAN

we're part of  
the solution



# Euro Ratings Improvements in Bus



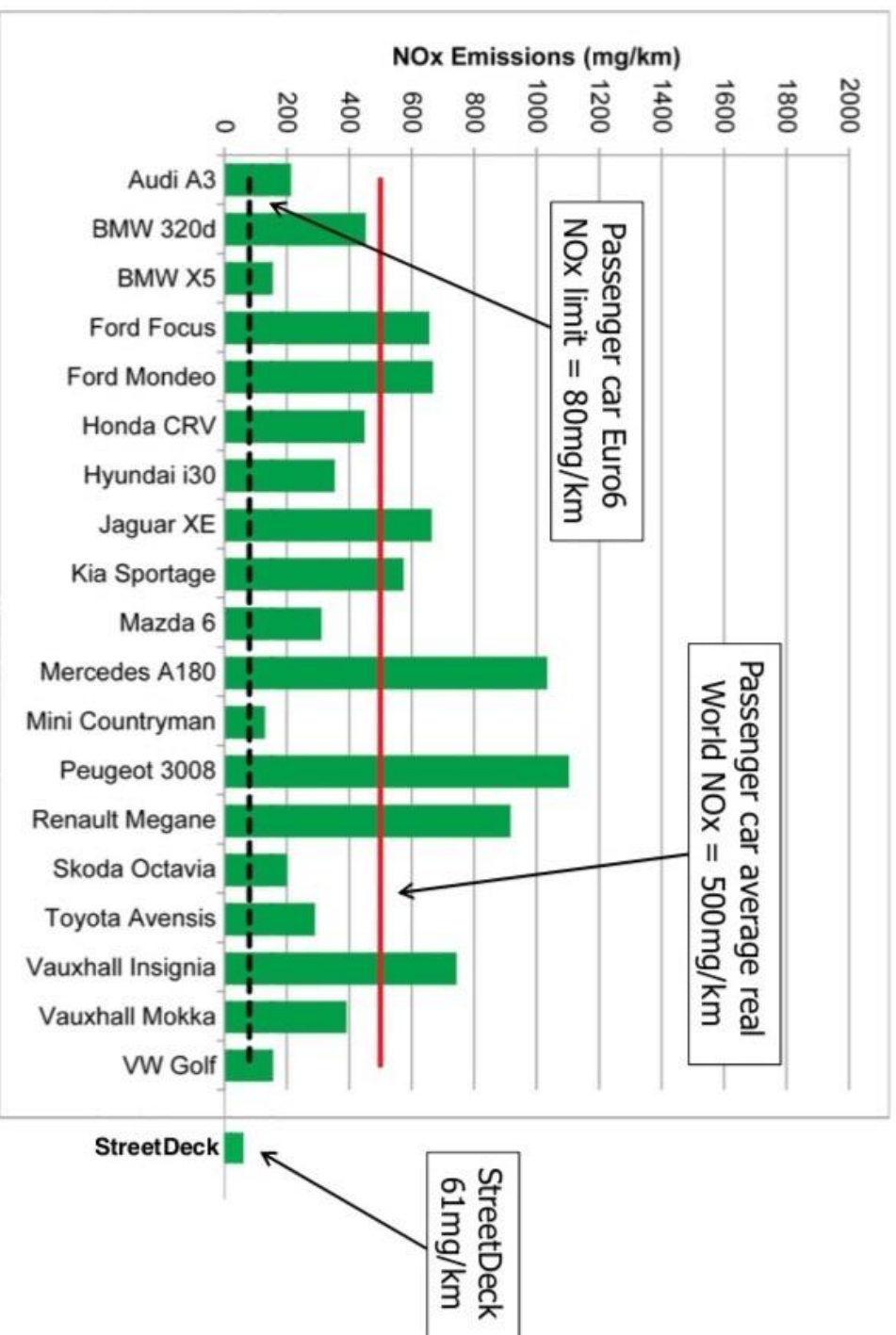
Diesel is a commercially viable and proven technology which delivers significant improvements.....



# Dirty Diesel?

Euro 6 Low  
Emission  
Buses

The cleanest  
diesel  
vehicles on  
the road





## Our Fleet Today



Type	Number	Percentage
Electric	3	0.5%
Euro 6	339	34%
Euro 5	275	32.5%
Euro 4	126	15%
Euro	151	16.5%
Other	14	1.5%
<b>Total</b>	<b>840</b>	



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# Our Investment

Investment

## NEW environmentally friendly fleet

**234**  
new buses



**32**  
built abroad



**202**  
UK built

**190**  
fitted with latest  
Euro VI engines

**GO GREEN  
GO CLEAN**





# In the Market for a new Motor?



Clean Diesel VI



Extended Range Hybrid – Diesel/Electric



Full Electric



Hydrogen





# Types of Electrics



## In-Depot Charging



## Opportunity Charging

# Salisbury Electric Project



<b>Buses (3)</b>	<b>£1,044,000</b>
<b>Electrical Supply and Connection</b>	<b>£207,324</b>
<b>Total Cost</b>	<b>£1,251,324</b>





# Salisbury Electrics Project

## Main Headlines

- Introduced January 2020
- Primarily Operating Salisbury
- 160 miles range
- 32.2 tonnes of CO2 saver per bus per year
- 15.5 tonnes of NOx per bus per year
- Renewable Energy Source in Partnership with Southern Electric
- 4 Hours to recharge
- Delivered in Partnership with DfT and Wiltshire Council
- Learn Engineering and Customer Experiences

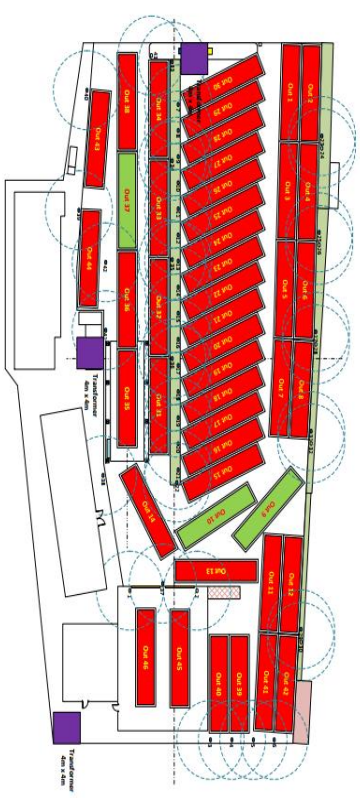


Wiltshire Council  
Where everybody matters

  
Department  
for Transport



# The Swings and Roundabouts



## Benefits

- Zero Emissions
- CO2 and NOx Reductions
- Smoother Ride
- Potentially Less Maintenance Costs
- Access to CAZ and ULEZ's

## Challenges

- Cost & Funding Mechanisms
- Terrain has big impact
- Depot Infrastructure and Land Assembly
- Electrical Supply and Installation – and Capacity
- Lifespan of Batteries
- Range of the Vehicles (in particular DD interurban)
- Large Fleet – Electrical Network Upgrade?



# All-Electric Bus Towns Swindon Bid



All-Electric Bus Town

Call for Expressions of Interest



**Swindon**  
BOROUGH COUNCIL

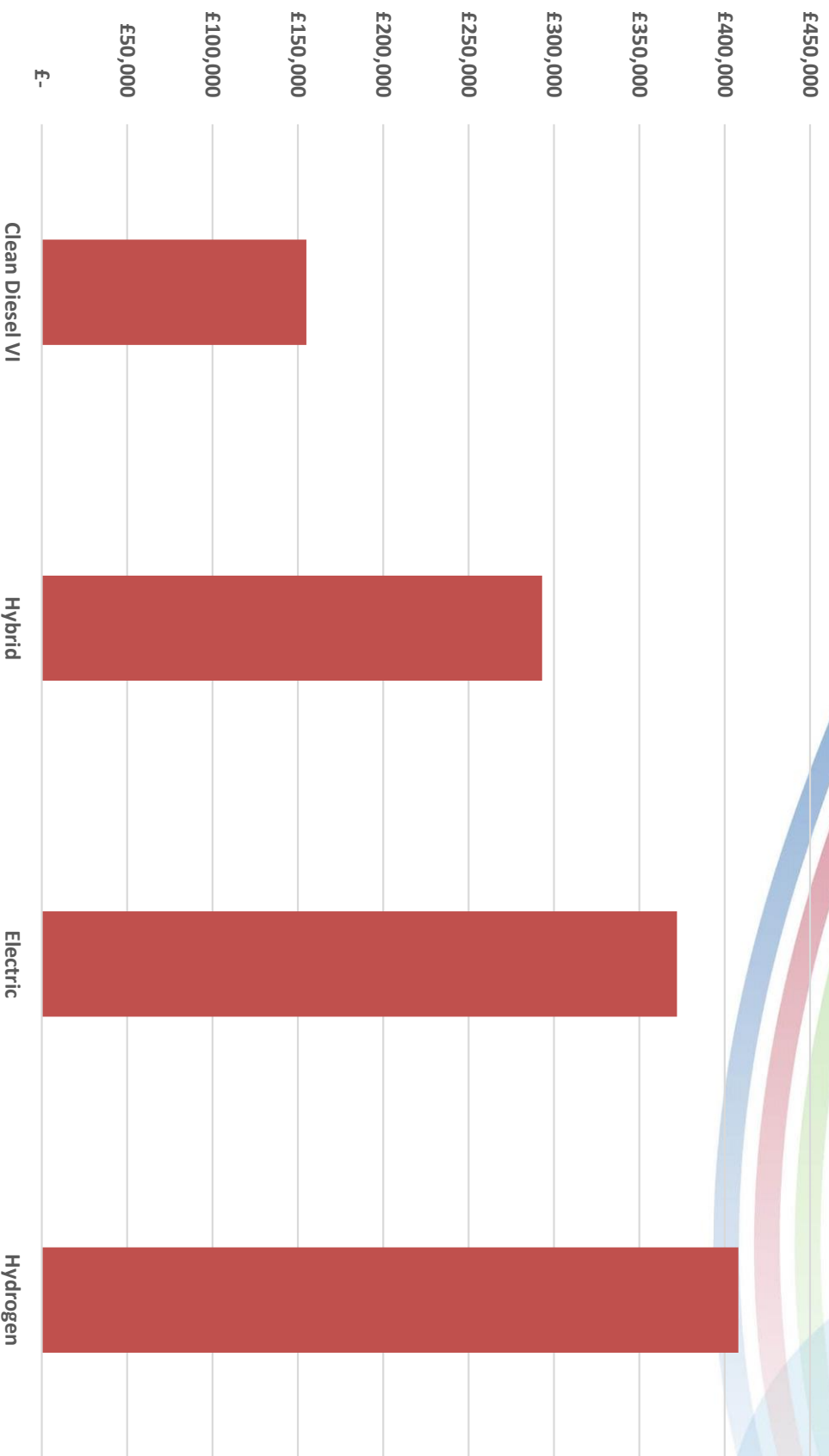


Investment	Outcomes
<p><b>Partnership bid between Swindon Borough Council, Swindon Bus and Stagecoach</b></p>	<p><b>Full Electric Buses on the Town Network</b></p>
<p><b>165 new buses in total – 2 main depots - £77m</b></p>	<p><b>Long Range Hybrids for Inter-Urban Routes</b></p>
<p><b>Air Quality Imprivement</b></p>	<p><b>Air Quality Improvement</b></p>
<p><b>Swindon Bus Investment £16.6m</b></p>	<p><b>Bus Priority and Real Time Information</b></p>
<p><b>Swindon Borough Council Investment £12m</b></p>	<p><b>Bus Boulevard Improvements</b></p>
<p><b>DfT ask £33m</b></p>	





# Vehicle Purchase Costs



# Zero Emission Buses alone are not the answer



- **Just 4% of UK roadside emissions coming from existing buses;**
- **We have to develop partnerships where our ambition to be zero emission is matched with priority measures;**
- **Need to reverse the decades of damage to bus journey times.**





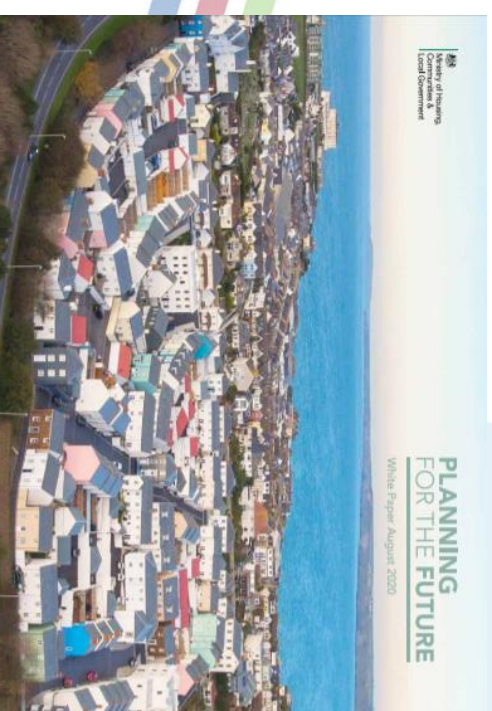
## **Decarbonising Buses – Key Themes**

- Electrical Supply – Network? Farms? Solar?**
- Land needed to supply charging hubs**
- Need to look at funding models – lease or purchase?**
- Needs seed funding – no pure business case for bus operators**
- Partnership is better to deliver better outcomes**





# New Government Planning for the Future White Paper



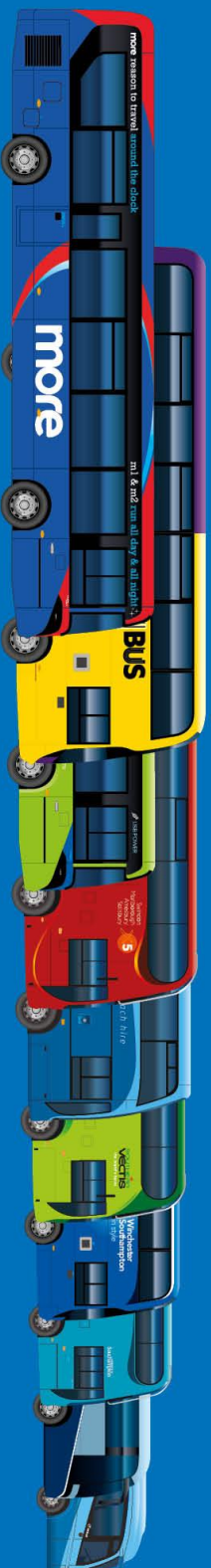
- **Planning system entirely removed without obvious direct replacement**
- **Public engagement would only be through the Local Plan**
- **Development requirements nationally set and apportioned to each LPA**
- **Developer contributions abolished and replaced with a national development value tax**
- **Transport considerations are entirely absent**
- **Development Management decisions could be predominantly about aesthetics not about how developments functioned**
- **Unclear how far we would be able to steer developments towards high-quality PT solutions**



## Impact of COVID-19

- Mileage around 90-96% of pre Covid-19 Levels (Average; September 2020)
- Patronage between 50-60% of pre Covid-19 Levels
- Currently reliant upon Government Support to maintain services
- Negative messaging around the uses of bus and train
- No proven Covid-19 infection traced to Public Transport – Studies in Germany and Austria hadn't found anyone with an infection on board with a stay of less than hours
- Services unlikely to bounce back to pre-Covid-19 levels when government funding ceases
- Likely to impact on Rural and Interurban services as well as reduced urban frequencies
- Will make settlements less sustainable and worsen air quality
- Need to get back on commercial footing to enable investment
- Current funding commitments cannot be fulfilled – where does this leave projects and partnerships





Thank you

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