

# SWARCO AIR QUALITY MANAGEMENT SOLUTIONS



The Better Way. Every Day.



Poor air quality is a recognised problem in our towns and cities. SWARCO's solutions help to improve our environment.

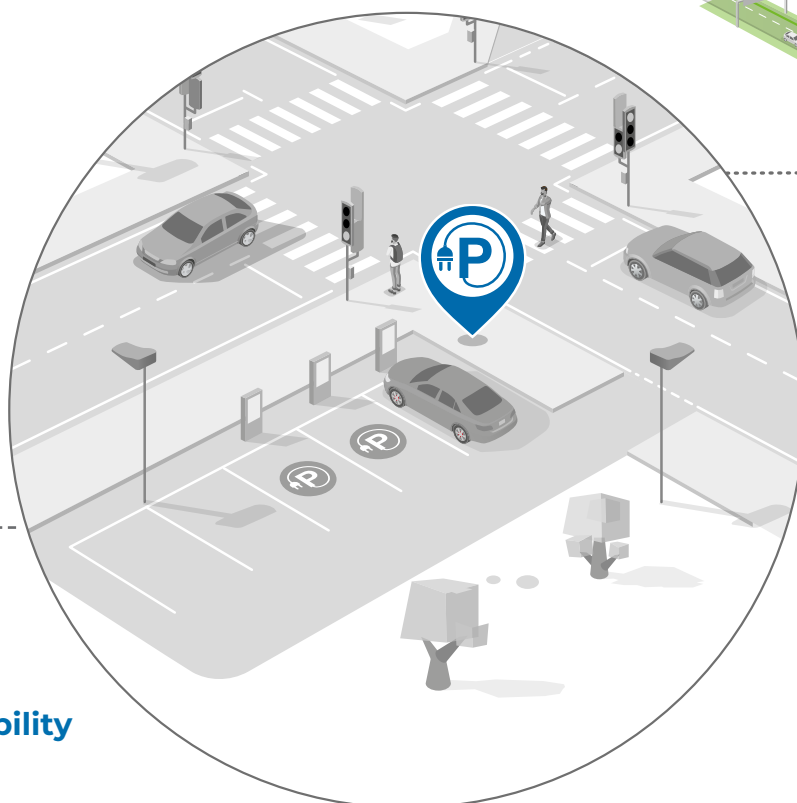
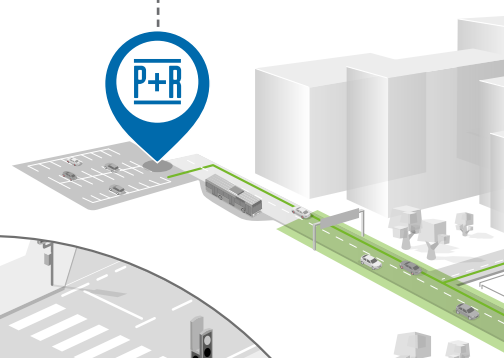
#### SWARCO Route Guidance

Divert vehicles away from identified problem areas using SWARCO's message signs. 'Air quality measures in use. Follow diversion.'



#### SWARCO Park & Ride

Encouraging the use of public transport



#### SWARCO eMobility

EV charging encourages the use of electric vehicles





# Improve air quality by directing traffic to the nearest parking space.

## PARKING GUIDANCE AND CAR PARK INFORMATION SYSTEMS

Motorists entering towns and cities are guided to the nearest available spaces, reducing vehicle emissions by keeping traffic flowing. Electric Vehicles can follow directions to available charge points.

### The challenge

- Driving around looking for parking spaces creates unnecessary traffic congestion and contributes to poor air quality

### The solution

- Real time monitoring of parking space occupancy
- SWARCO's Zephyr system analyses and forecasts parking availability
- Set Variable Message Signs to inform and guide road users

- Integration with online services and Apps, including reservation and payment for parking and EV charging
- Integration with in-vehicle information systems

### The benefits

- Automated real-time management of your parking estate
- Encourages electric vehicle use
- Promote out of town Park & Ride
- Versatile Variable Message Signs (VMS) can be used for many applications.
- More convenient for the road user
- SWARCO's modern parking management and guidance helps cities make their transportation systems more efficient and improves overall quality of life for everyone





# FIND A SPACE WITH EASE



## DYNAMIC SIGNAGE

SWARCO's dynamic variable message signs placed at key strategic locations display any required information. This can include parking space availability, traffic information or any free text message or graphic and can be easily managed using SWARCO Zephyr.



## SWARCO ZEPHYR

SWARCO Zephyr is an online central control system that manages your signage and monitoring systems together in harmony. This easy to use cloud based solution can be accessed anywhere and gives you a full overview of your assets, live traffic monitoring and EV charging.



## MONITORING

Access and analyse real time data from barriers, loop detectors, magnetometers, ultrasonic and video sensors. Monitor availability and use of EV charging points.

# CREATE GREENER ROUTES THROUGH CITIES

Use SWARCO's air quality monitoring solutions to redirect traffic and improve your environment.  
Take a new direction.

## ROUTE GUIDANCE



Real time air quality data is used to trigger the diversion of traffic to prevent the build-up of harmful particulates and gases at key locations

### The challenge

- Slow moving and idling vehicles exacerbate the problem of poor air quality in our cities

### The solution

- Detection of deteriorating air quality is used to implement diversion strategies, moving vehicles away from the affected area
- Drivers are informed by dynamic variable message signs of the route to be taken and why

- Publicise enforcement measures in place
- Configure and manage thresholds of air quality for intervention
- Increase public awareness
- Implement speed advice or variable speed limits
- Historic data is retained for analysis and forecasting

### The benefits

- Deteriorating air quality is identified before reaching harmful levels
- Action can be taken to prevent the issue occurring
- The public can be informed and educated
- VMS can also be used to promote general traffic information











# INNOVATORS IN EV CHARGING

SWARCO is one of the leading providers of EV charging solutions. SWARCO eVolt supplies a complete range of charge point infrastructure and payment systems.

## OUR MARKET LEADING EV CHARGING SOLUTIONS

The use and ownership of electric vehicles is increasing but more needs to be done to create the infrastructure needed for mass uptake. SWARCO provides solutions for the future.

An increased number of charge points makes the user journey more convenient.

### The challenge

- Electric Vehicle users need confidence that they can park and charge their vehicles whenever required
- Informing and guiding EV drivers to available charge points in the city and facilitating easy payment will encourage the switch to zero emission vehicles

### The solution

- SWARCO has a range of

charging infrastructure suitable for applications including on street, car parks, charging hubs and home charging systems

- The range includes AC and DC chargers including the latest rapid chargers
- Locate and reserve charging points using an easy to use mobile app
- Integrate with SWARCO Zephyr to display EV charging availability on VMS
- Renewable energy solutions including solar canopies are also available

### The benefits

- Increased use of electric vehicles
- Integrated guidance reservation and payment systems
- Increases awareness of personal transport alternatives
- Zero exhaust emissions

# NUMBERS SPEAK LOUDER THAN WORDS.

Facts and figures from the world of SWARCO.

**15** minutes.

One of the major challenges in modern electromobility is charging time. The charge points in the SWARCO EVOLT DC Raption series can charge e-cars up to 80 percent of their capacity within 15 minutes.

**1/2** century.

Our history began in 1969 with the production of reflective glass beads. Half a century later SWARCO is among the world leaders in the areas of road marking and traffic management.

**90**

percent.

LED light sources in SWARCO traffic lights and streetlights use up to 90 percent less energy than classical light bulbs, reducing CO2 emissions.

**70**  
countries

From Vienna to Oslo, from Dubai to Sydney, from Cape Town to São Paulo: SWARCO products, systems and services keep traffic in motion in some 70 countries around the world.

**3600**  
mobility experts

Our 3600 employees around the world are people on a mission: They support our customers in delivering modern mobility onto the roads safely.





*We improve quality of life  
by making the travel  
experience safer, quicker,  
more convenient and  
environmentally sound.*



**SWARCO** | The Better Way. Every Day.

SWARCO is a growing international group providing the complete range of products, systems, services and solutions for road safety and intelligent traffic management.

With five decades of experience in the industry, the corporation supports the growing mobility needs of society with turnkey systems and solutions in road marking, urban and interurban traffic control, parking, public transport, infomobility and street lighting. Cooperative systems, I2V communication, electromobility, and integrated software solutions for the Smart City are latest, future-oriented fields in the group's portfolio.

[www.swarco.com](http://www.swarco.com)

