



SUSTAINABLE TRANSPORT

# DIGITALIZATION & AUTOMATION IN HEAVY TRANSPORT

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SCANIA, ASIA & OCEANIA



DRIVE : SWEDEN

SCANIA



SUSTAINABLE TRANSPORT

# WHAT DO WE MEAN WITH SUSTAINABILITY?

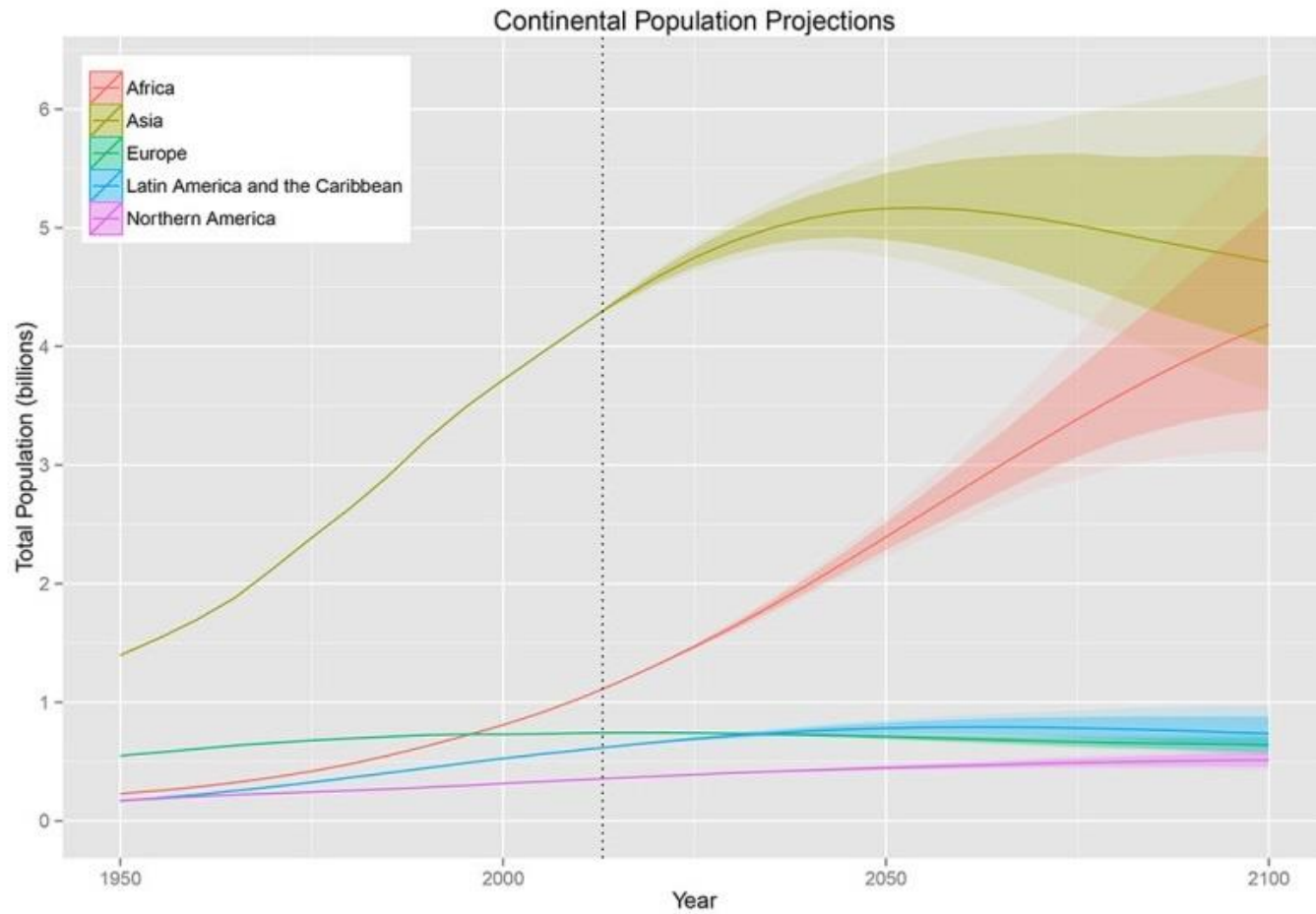
LIVEABILITY  
THRIVEABILITY  
PROSPERITY

QUALITY OF LIFE





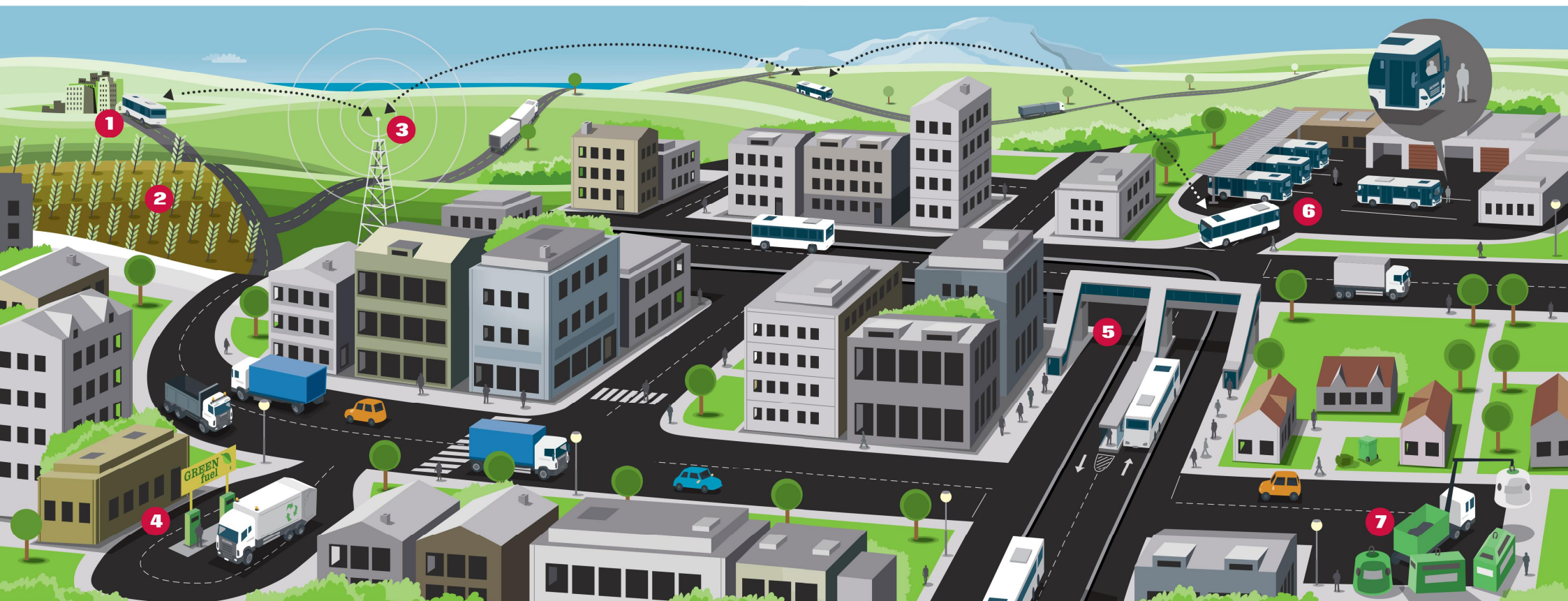
# FUTURE SCENARIO





SUSTAINABLE TRANSPORT

# URBANIZATION



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SUSTAINABLE TRANSPORT

# URBANIZATION 21<sup>ST</sup> CENTURY





SUSTAINABLE TRANSPORT



# MAGNIFYING NEGATIVE EFFECTS

Pollution



Congestion



CO<sub>2</sub> Emissions &  
Climate change



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SUSTAINABLE TRANSPORT

# AT THE SAME TIME...





SUSTAINABLE TRANSPORT

# DISRUPTORS OF CV INDUSTRY

**NEW TECH**

ALTERNATIVE FUELS

CONNECTIVITY

AUTONOMOUS VEHICLES

ELECTROMOBILITY

**NEW  
BUSINESS  
MODELS**

INTELLIGENT TRANSPORT  
SYSTEMS


MOBILITY AS A SERVICE



SUSTAINABLE TRANSPORT



# CONNECTED

A world map with glowing white points representing connected vehicles. The points are most densely clustered in North America and Europe.

Currently  
**230,000**  
connected  
vehicles  
(65% of rolling  
5 year fleet)

Driving over  
**49,000**  
laps around  
the world  
every month

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# THE THREE MAIN BENEFITS -OF AUTONOMOUS VEHICLES

Lowered Fuel  
Consumption &  
Environmental  
Impact



Higher Road  
Capacity



Increased Safety

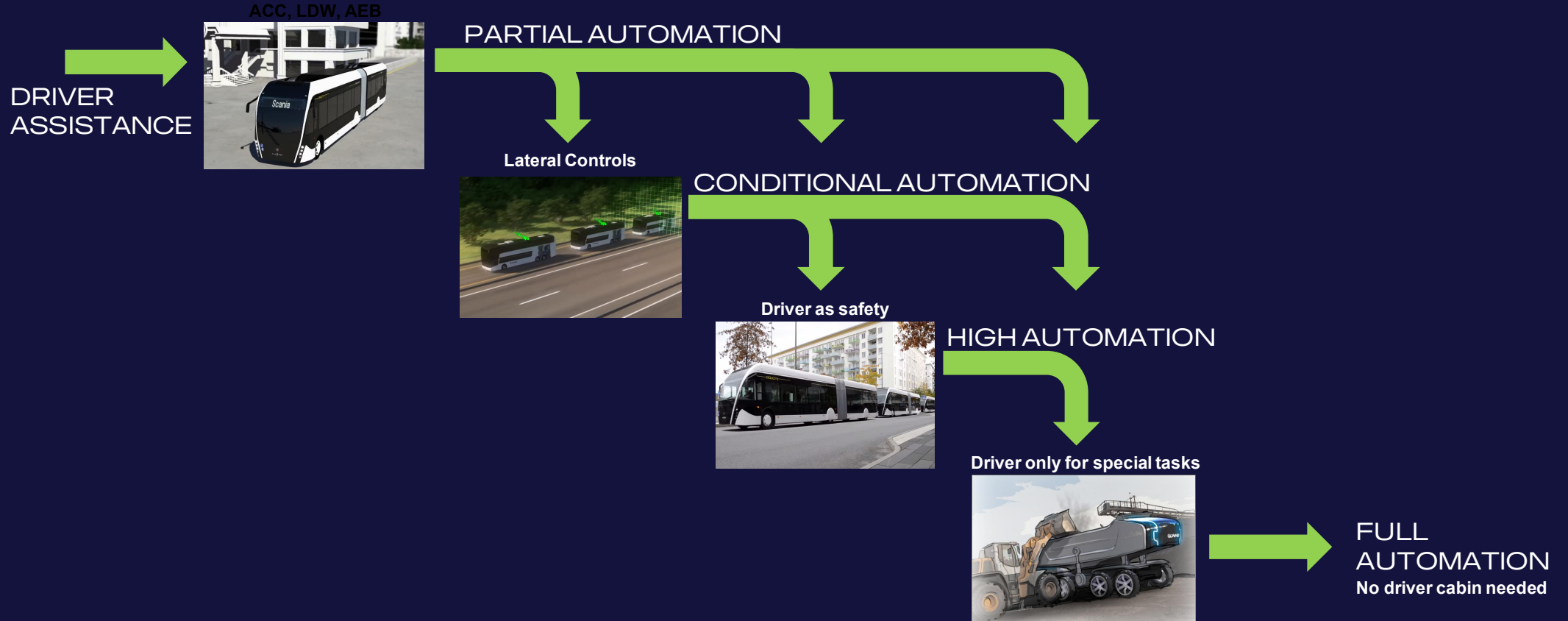


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# PATH TO FULL AUTONOMY



# CHALLENGES









# FIRST MOVER APPLICATIONS



## Automated Mining

- Driverless industrial operation
- Predictive maintenance services for 24/7/365 operation
- -30% TCO\*, -10% CO2



## Automated Platooning

- Platoon with driver in the first vehicle only!
- Higher Road capacity
- -20% TCO, -7% CO2



## Automated Bus Services

- Modular bus platoon with one or no driver
- Estimated Time of Arrival
- -15% TCO, -10% CO2



## Intelligent Urban Distribution

- Profit maximization via Owner Support
- Efficient resource allocation
- -20% TCO, -10% CO2



AUTONOMOUS VEHICLES

# PLATOONING



**1/3 OF  
OPEX IS  
DRIVER  
SALARY**

**+ UP TO 15% FUEL  
CONSUMPTION  
REDUCTION**







AUTONOMOUS VEHICLES

# DEVELOPMENT TIMELINE

**2020**

**PILOTED  
PLATOONING  
TECH (LAT.  
CONTR.)**

**2023**

**PLATOONING WITH  
DRIVER IN THE FIRST  
VEHICLE ONLY**

**2030**

**FULLY  
AUTONOMOUS  
TRUCKS**

**BUT, WILL NATIONS BE READY?**



AUTONOMOUS VEHICLES

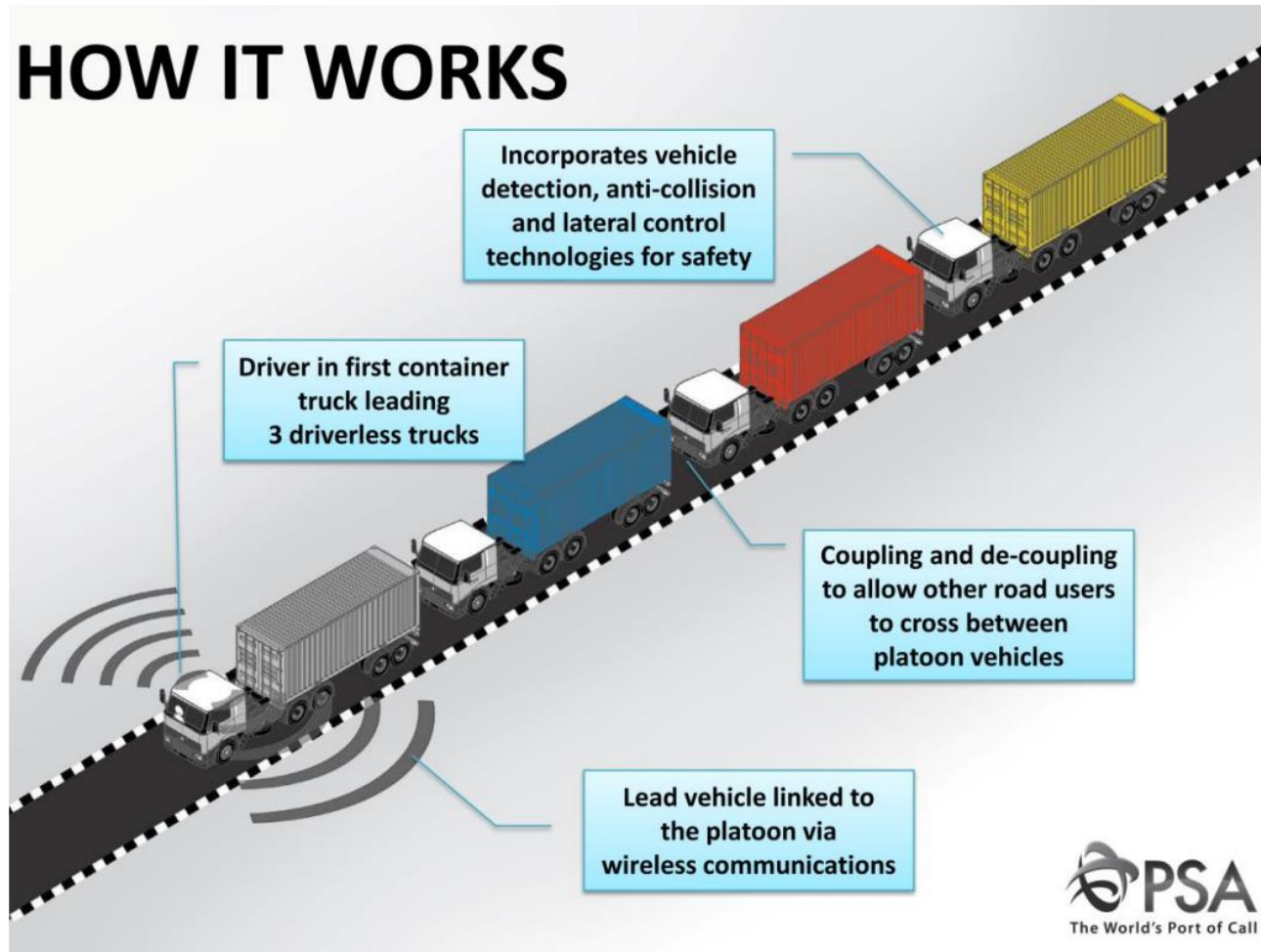
# SINGAPORE TAKING THE LEAD

- **NUTONOMY AUTONOMOUS TAXI PROJECT**
- **SMRT AUTONOMOUS SHUTTLE BUS PROJECT**
- **MOT AUTONOMOUS ROAD SWEEPERS & GARBAGE TRUCKS**
- **PSA AUTONOMOUS CONTAINER HAULAGE**





# PLATOONING AT WORK



AUTONOMOUS VEHICLES

# HERE & NOW



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