



# Mercedes-Benz

Innovación en el diseño de autobuses

UN IMPULSO AL TRANSPORTE PÚBLICO METROPOLITANO



ETSI Caminos, Canales y Puertos de Valencia | 24/10/2018



Mercedes-Benz  
The standard for buses.

# Urban buses former Concept



# Urban buses former Concept



**Mercedes-Benz LO 3500 personalizado, 1935**

# Urban buses today Concept



# Urban buses today Concept



# Urban buses today Concept (Saint Nazaire 70,000 citizens)



- Inauguración : 2012
- Longitud : 9 km
- Frecuencia : 5 min
- Vc : 22 km/h
- Pasajeros/día: 12.000



## Success story BRT:

- +60% daily passengers
- +20% sporadic passengers
- +20% passenger satisfaction

Attractive and innovative external and interior design

TICs (Passenger information)

Regularity / Punctuality /Reliability



# Mercedes-Benz Future Concept

## Intention

### Interior

layout

design theme

light concept

color and trim

### Exterior

design theme

light concept



# intention





# Mercedes-Benz Future Concept

Intention

**Interior**

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color and trim

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# interior layout

***„inside out'***



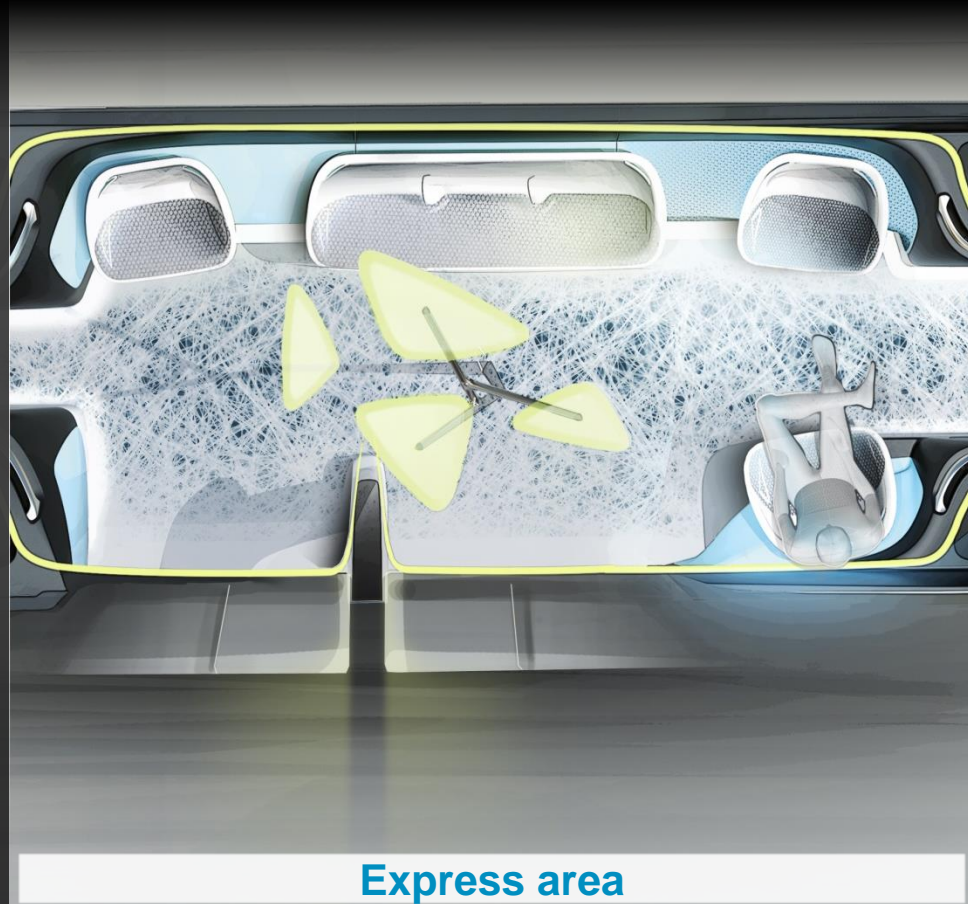
Lounge area

Express area

Service area

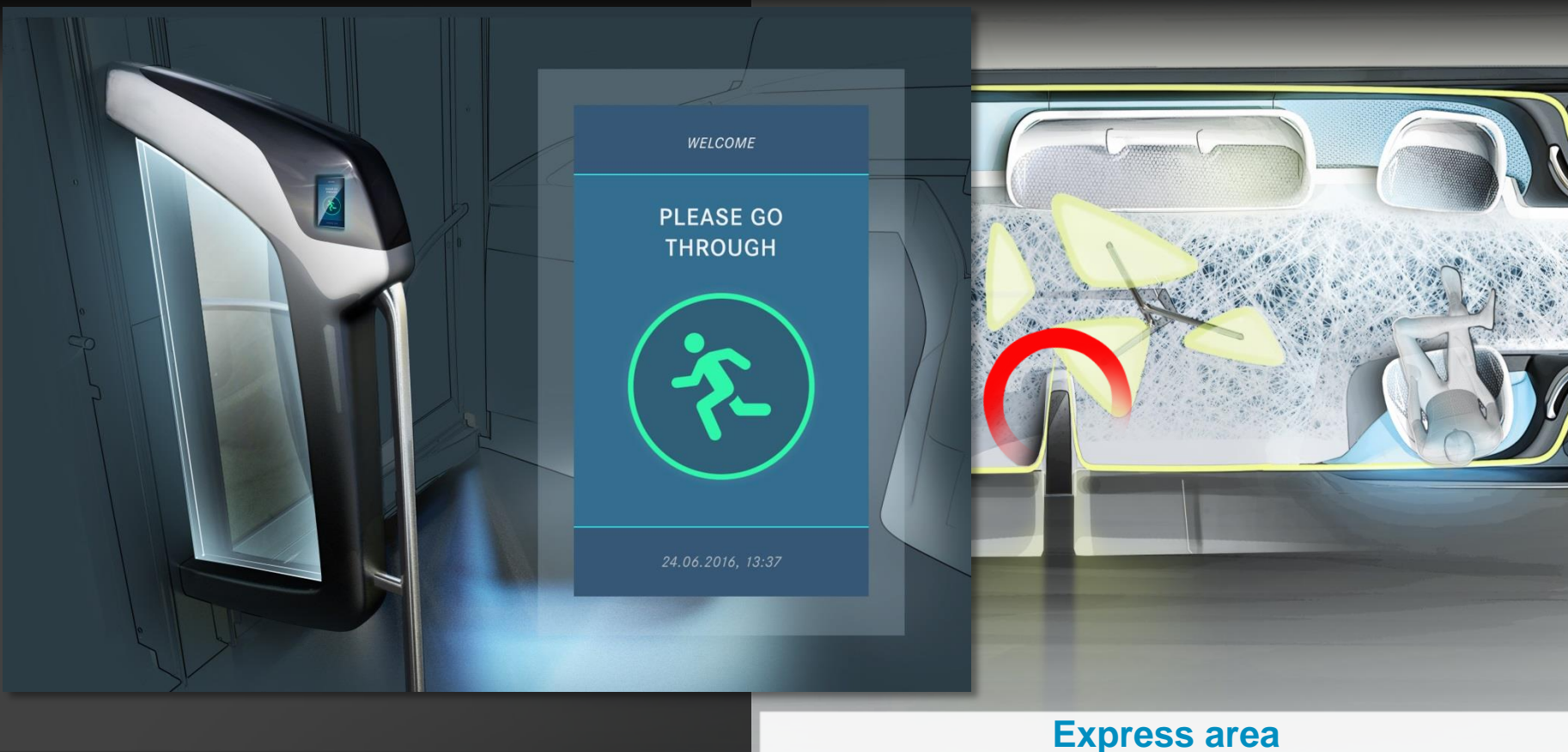
In our concept we created three main areas for passengers that refer to their needs and expectations regarding a future city bus.

# interior layout



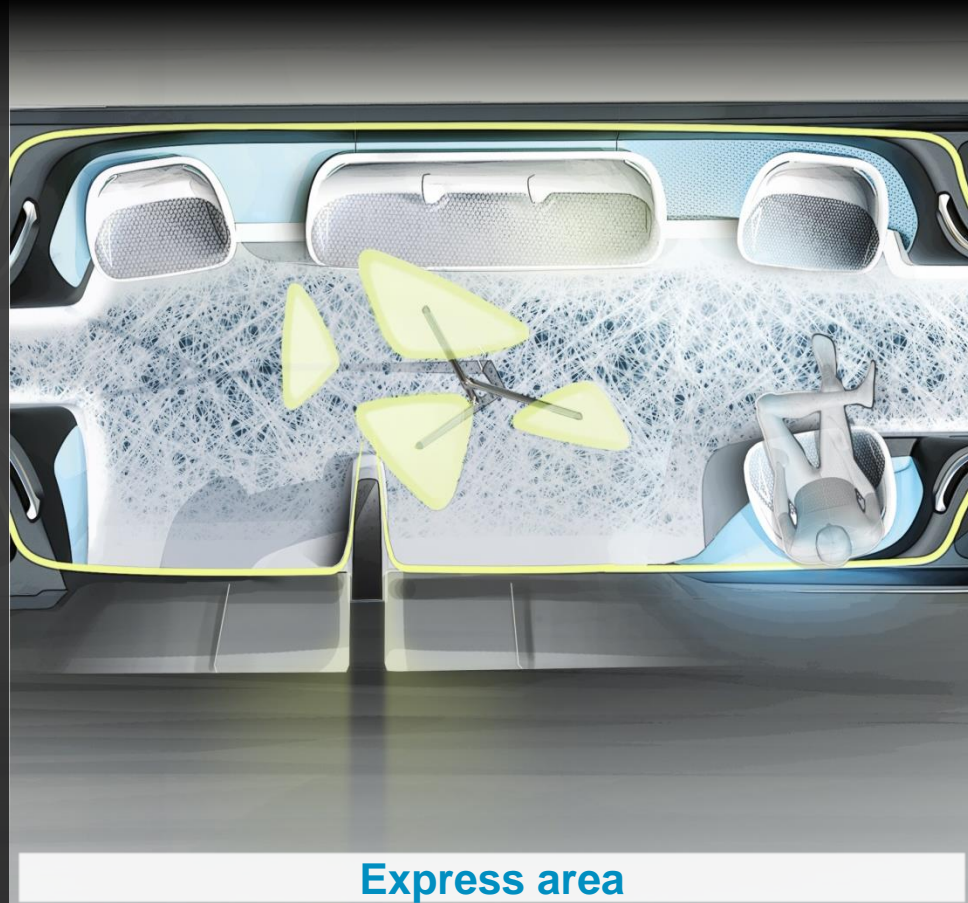
double door for an optimized passenger flow seats facing entry / exit e-ticketing system information panel

# interior layout



The bus has two ticketing systems that are positioned close to the doors to allow fast boarding. There is also a grab rail integrated between the doors to provide maximum safety for the passengers. The ticketing system also functions as a partition wall to keep passengers out of the area between the doors to avoid injuries.

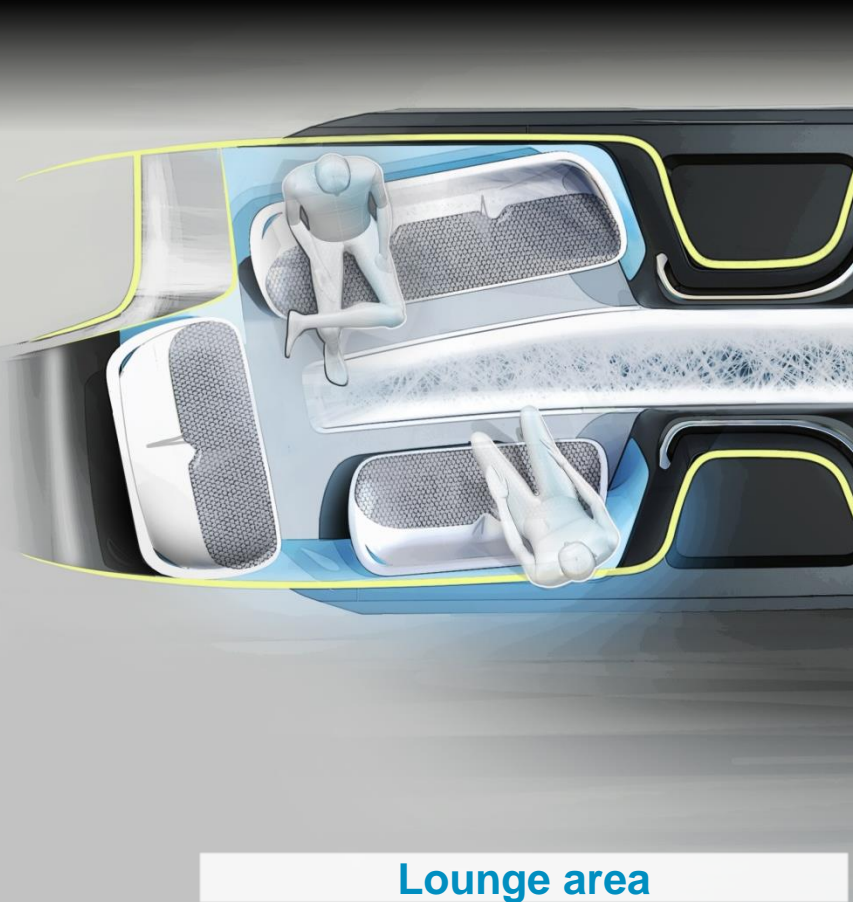
# interior layout



On the opposite side of the entrance you can see two 43 inch monitor panels with destination and connecting information.

They can also be used for advertisement.

# interior layout

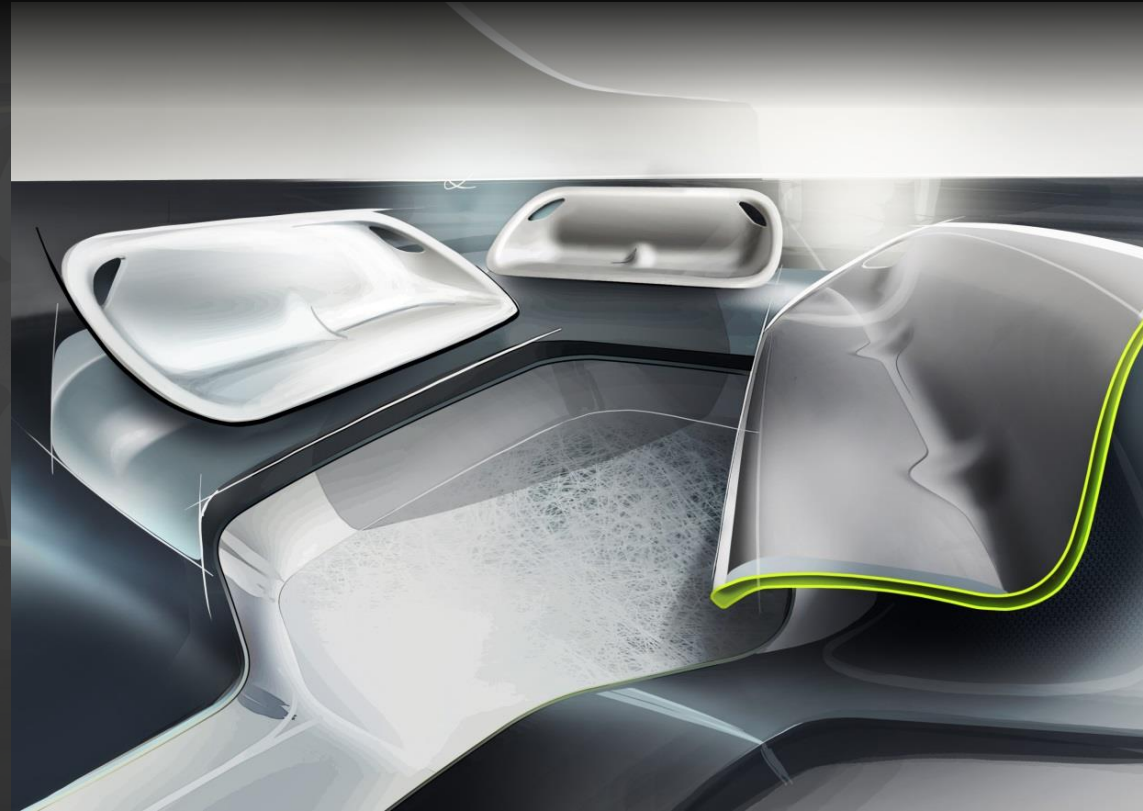
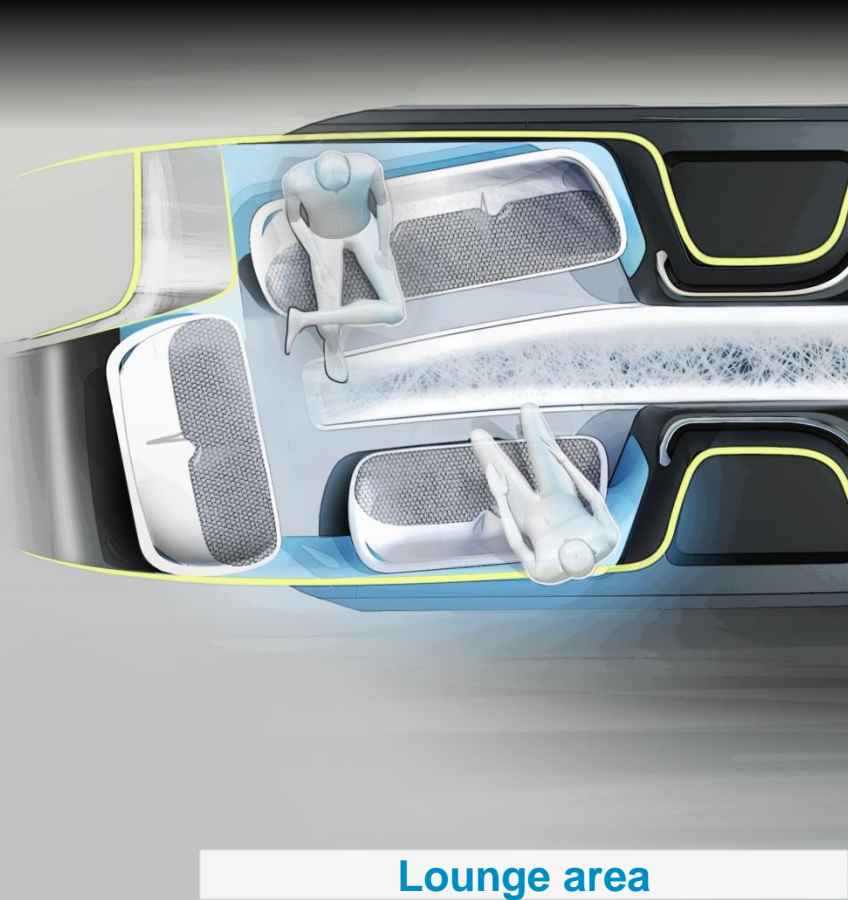


Lounge area

Suite



# interior layout



Suite allows passengers to stay comfortable in a well defined and cozy area at the rear end of the bus.

# interior layout



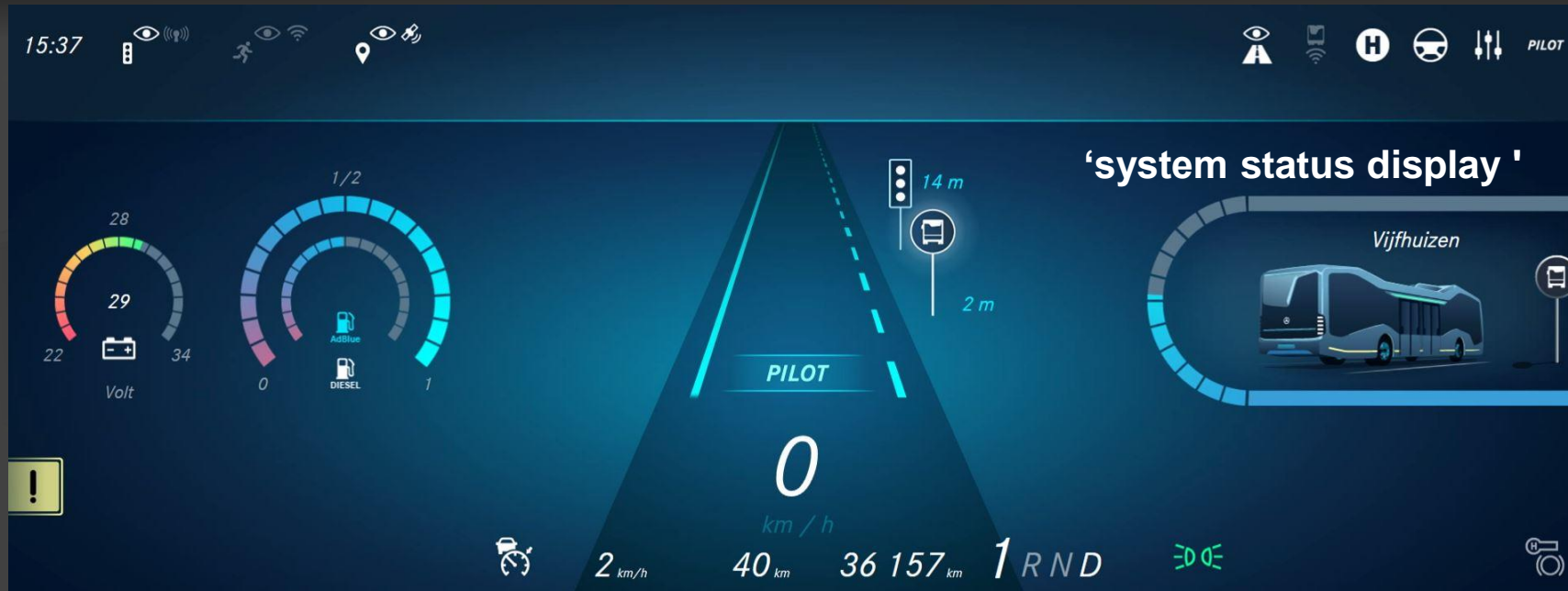
new HMI

wrap around fabric dashboard

communication between „driver' and passenger possible



# interior layout

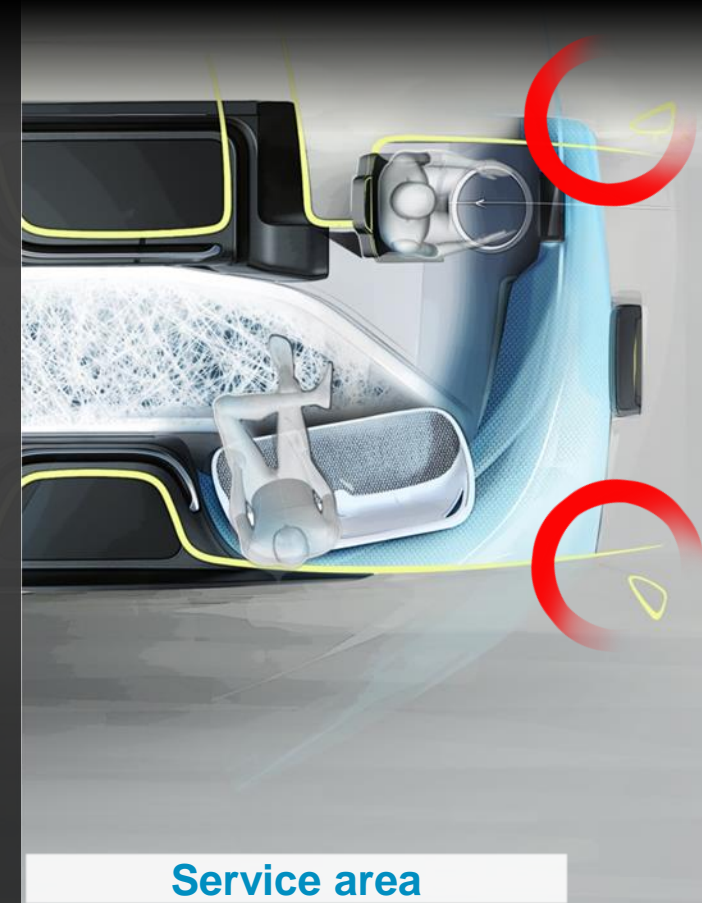


## New HMI\* concept

All necessary information integrated in a 13 inch driver faced display - e.g. system status, bus information and CityPilot information.

\* HMI = human-machine-interface

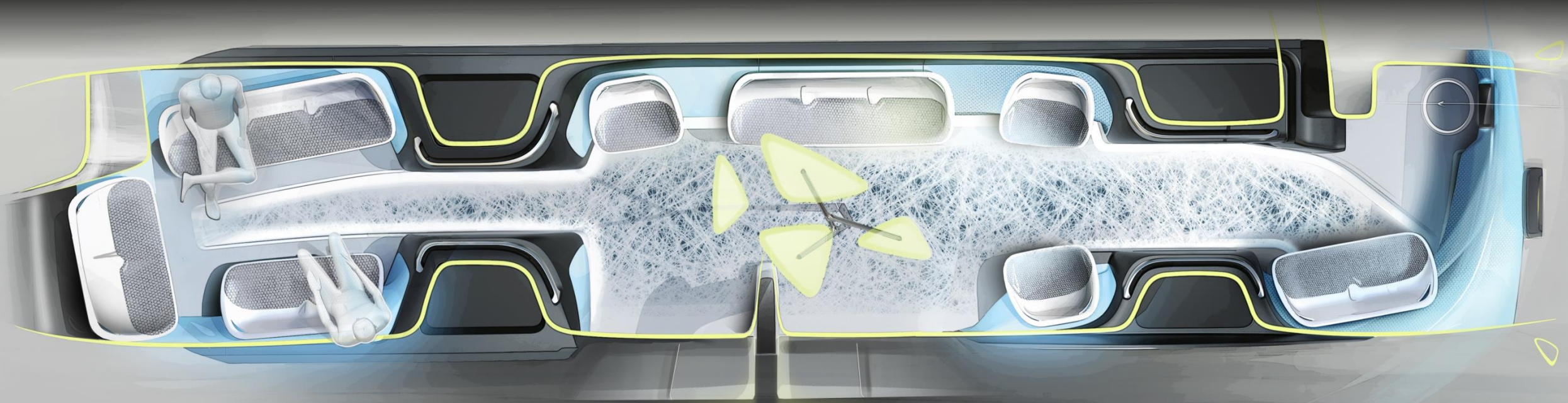
# interior layout



## Mirror Cam

Monitors positioned in the same view angle like the current mirror system.

# interior layout



## Lounge area

suite  
wrap around fabric covers

## Express area

double door  
e-ticketing with grab rails between the doors  
information panel 2x43 inch monitor  
seats facing towards exit

## Service area

13 inch display,  
wrap around fabric dashboard  
communication with driver  
possible

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design theme

light concept



# design theme

key sketch



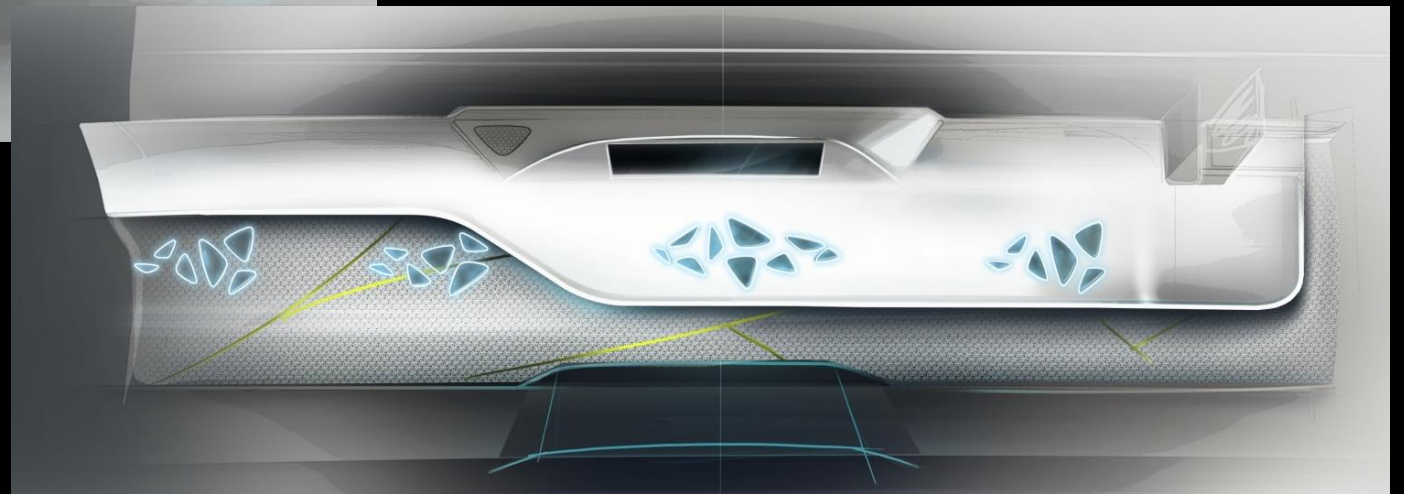
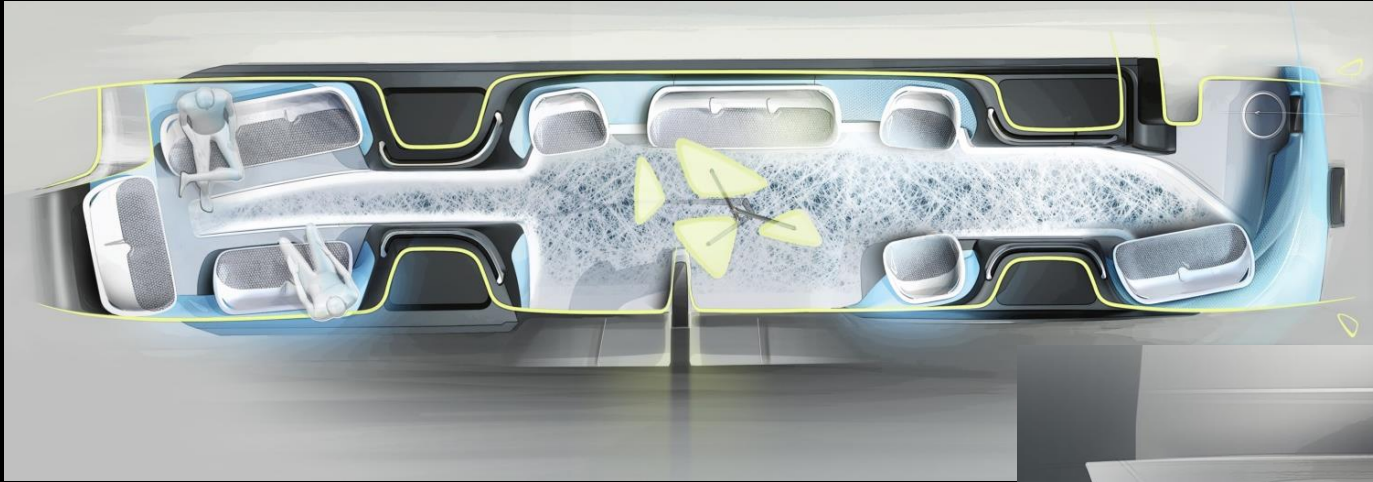
'seats'

'footpath'

'trees with leaves'

'rolling park'

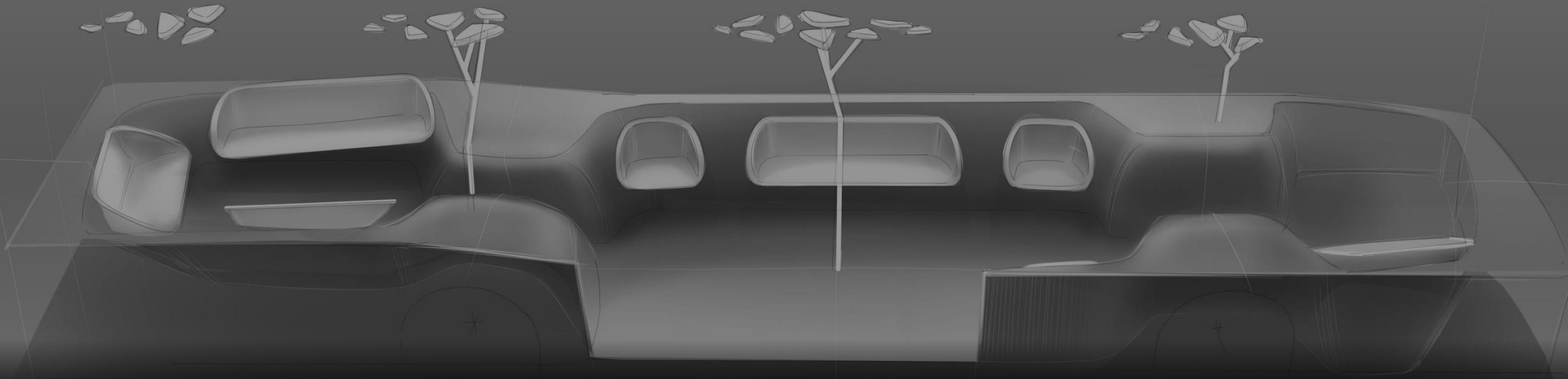
# design theme



The inner ceiling is separated in two parts. On the driver side the white panel flowing in a soft sweep through the complete bus and ends as the vertical engine cover. It gives you an impression of the modern architecture style of Amsterdam.

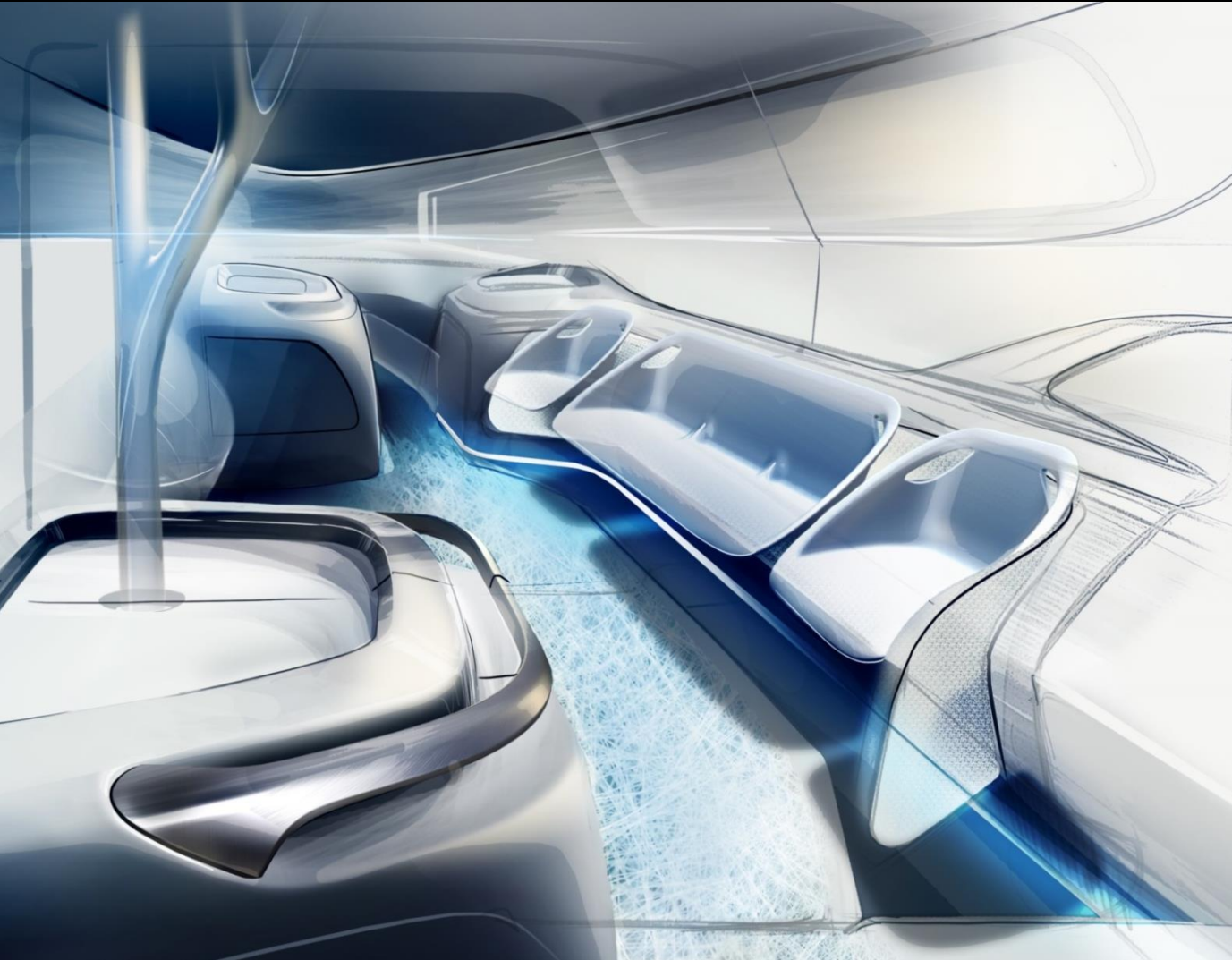
The other side is covered with a friendly light grey fabric with lemon green details. Both a reminiscence of city park and nature.

# design theme



Basic styling theme shown in this picture as an interpretation of an open space with large windows, so you feel like on a terrace with 'trees' and 'suites'. On the other side, the sidewall and the comfortable seats give you the feeling to be in a safe place.

# design theme



The seats / suites are a modern interpretation of classic interior seats and often used in public areas today.

This underlines the attractiveness of the city bus.

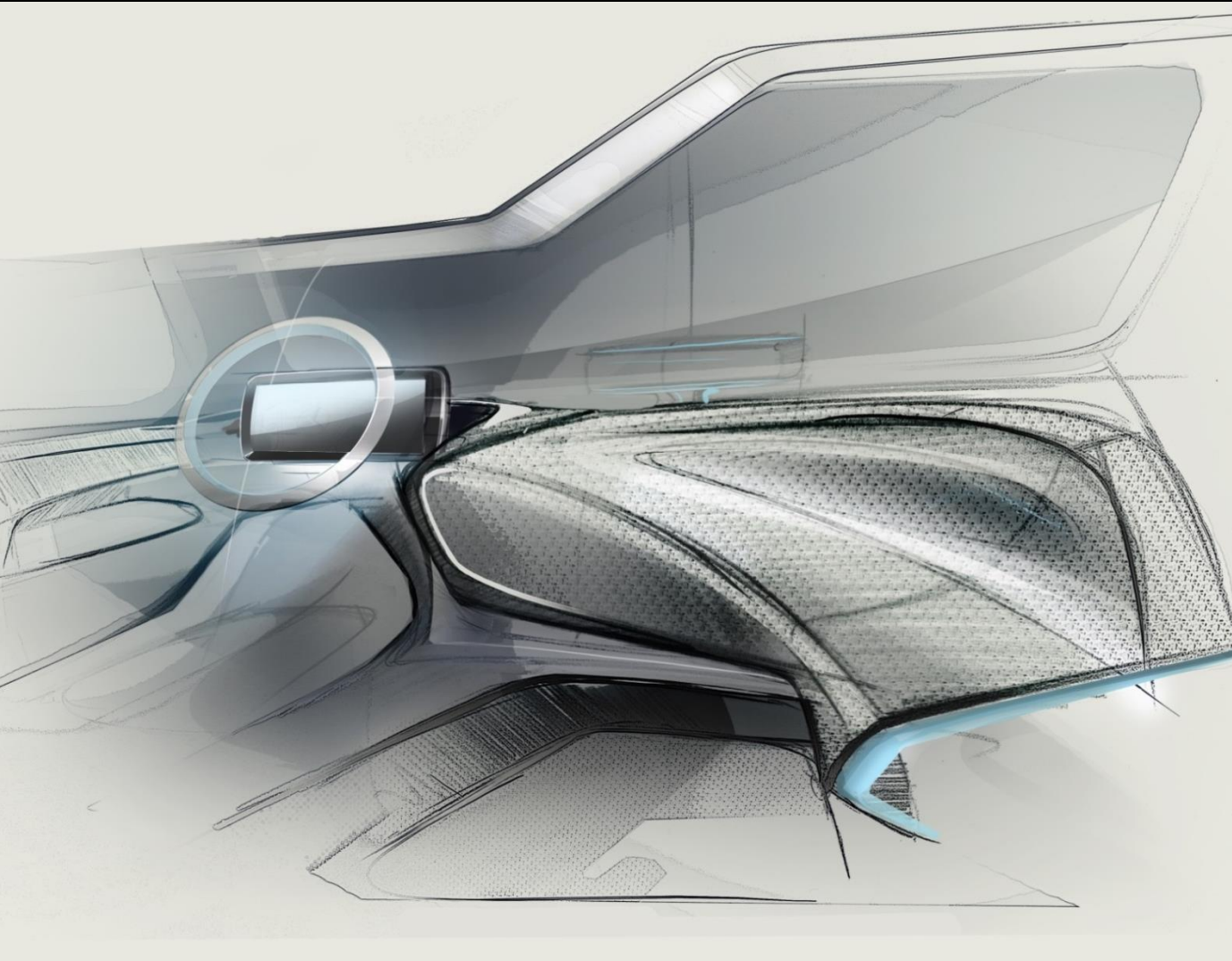
All of them are mounted to the fabric covered sidewall.

The arrangement in the bus allows passengers to get in touch with other passengers but also to have privacy.





# design theme



## Fabric dashboard

Styling to integrate the surface (with its touch and feel) much more into the passenger area with its wrap around theme.

# Mercedes-Benz Future Concept

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## Interior

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**light concept**

color and trim

## Exterior

design theme

light concept



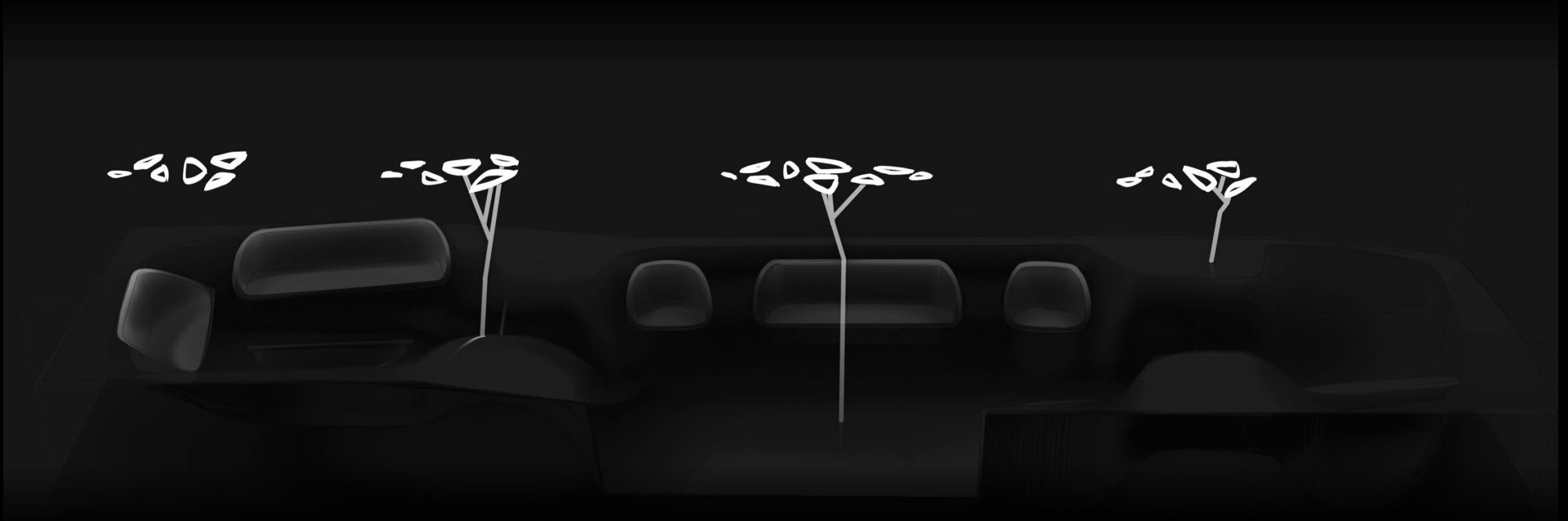
# light concept



Our light concept has two aims

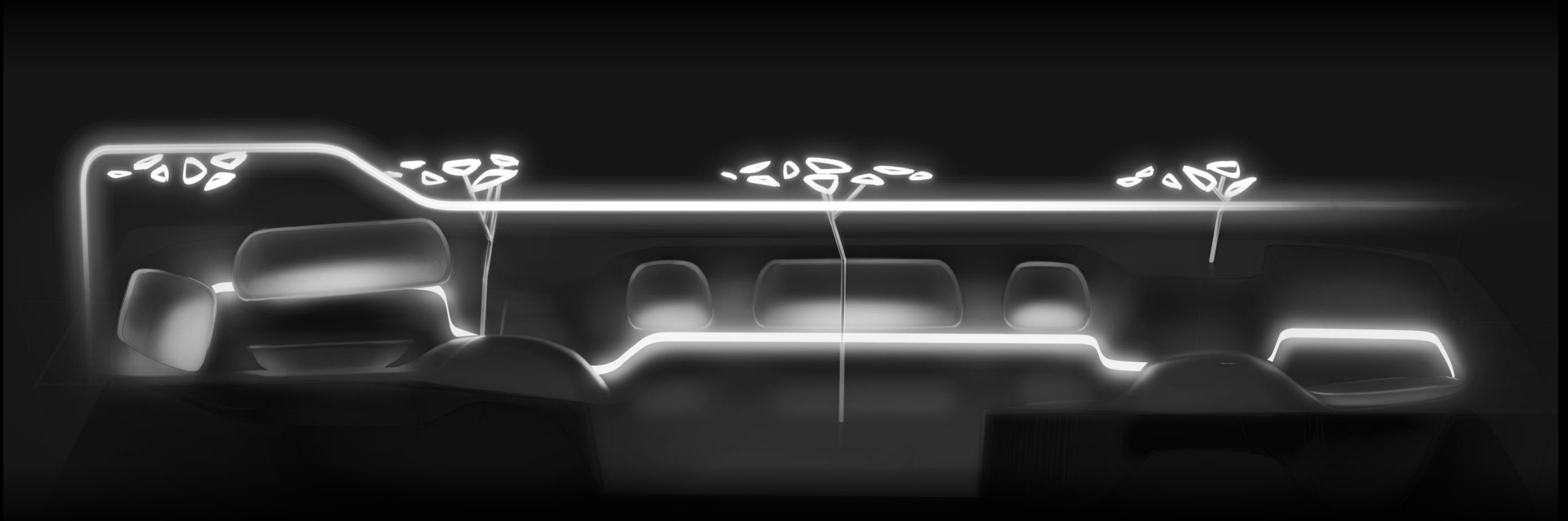
- passengers feel comfortable
- show the current driving status

# light concept



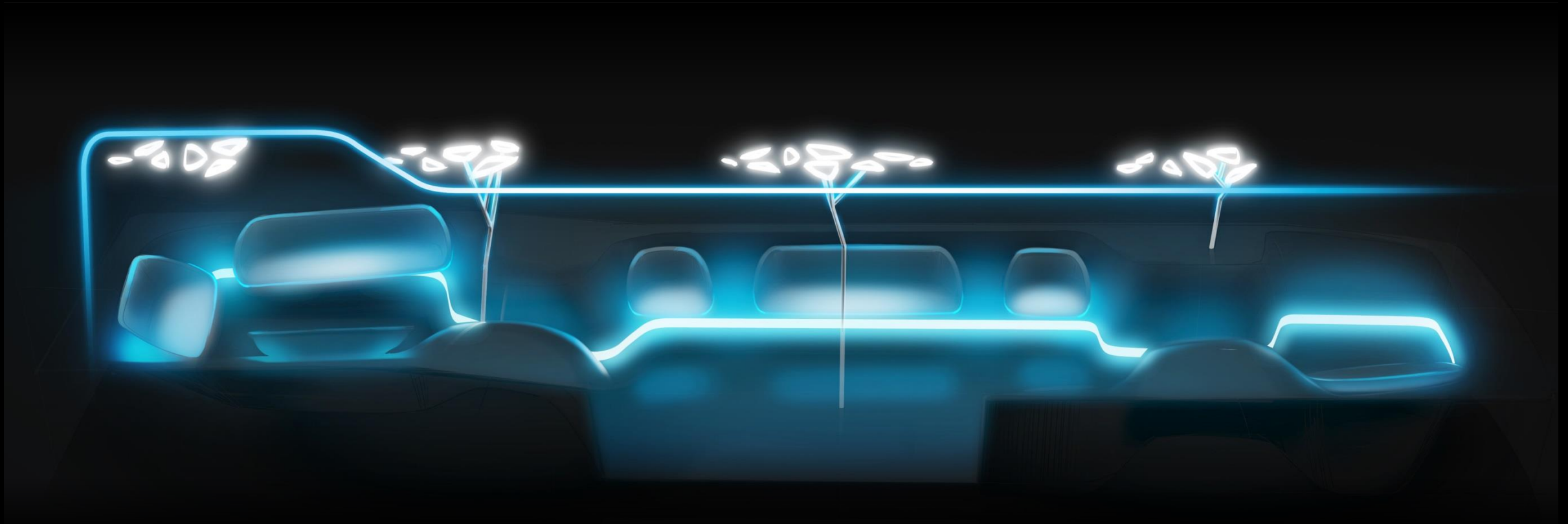
Grab rails running into luminescent leaves positioned in the ceiling.  
This gives you the feeling to sit under a tree at full moon.

# light concept



In addition to the atmospheric luminescent leaves, indirect light is shining at the ceiling and the floor. This gives passengers orientation and informs about the operation mode: White means driven by driver.

# light concept



Except the leaves, the lights will change smoothly into a bluish light when the bus is driven.

# Mercedes-Benz Future Concept

## Intention

## Interior

layout

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light concept

**color and trim**

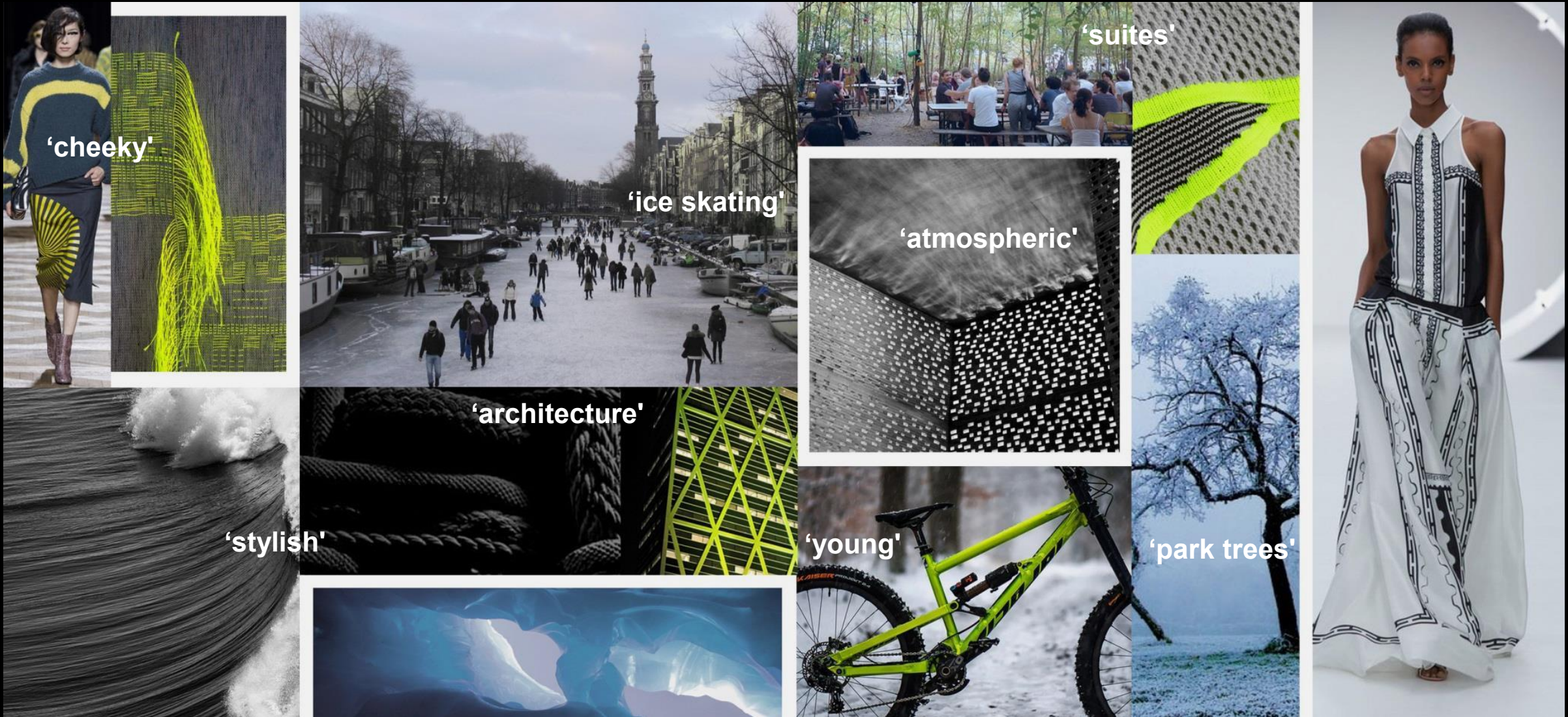
## Exterior

design theme

light concept



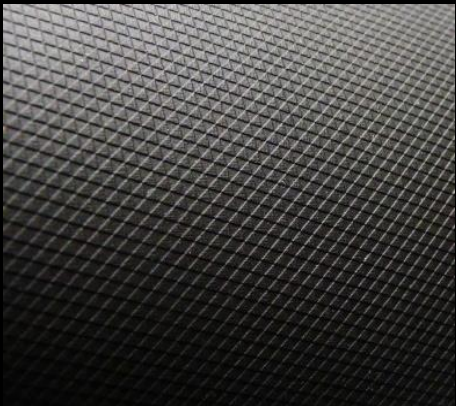
# c&t concept



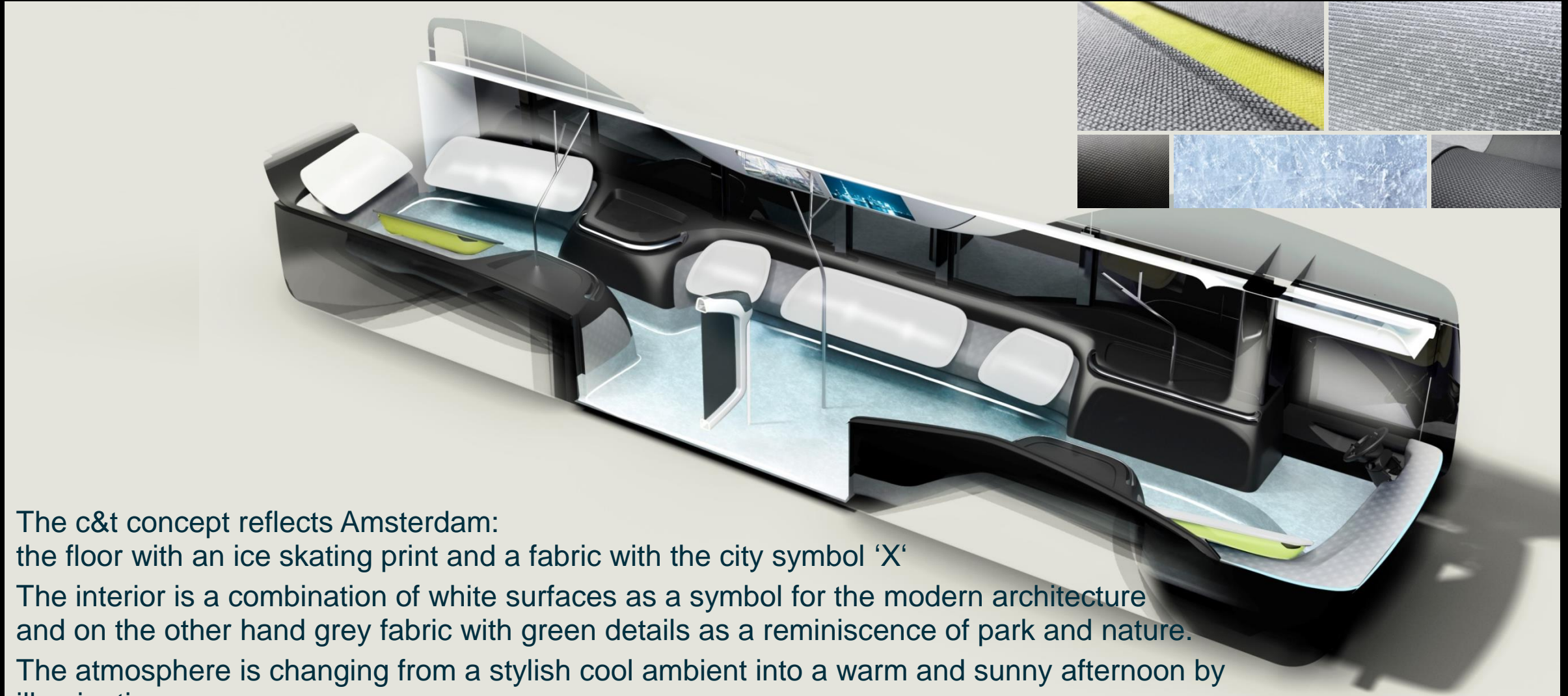




**'cheeky'** **'traditional'**  
**'park tree'** **'stylish'**  
**'young'** **'ice skating'** **'architecture'**

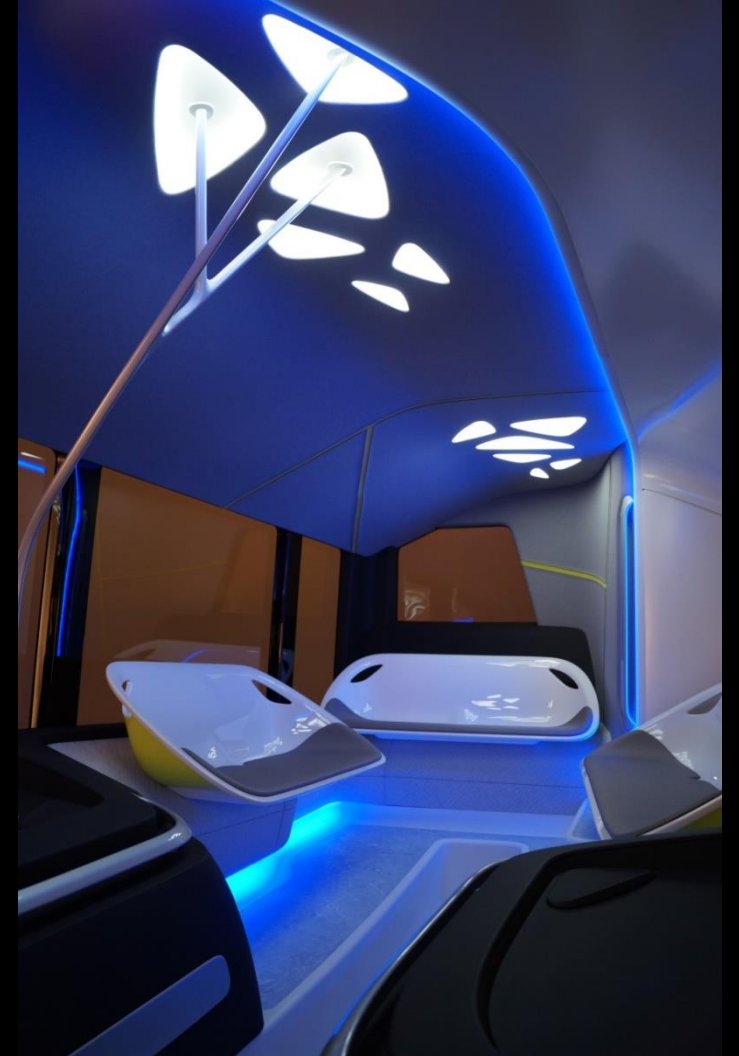


# c&t concept



The c&t concept reflects Amsterdam: the floor with an ice skating print and a fabric with the city symbol 'X'. The interior is a combination of white surfaces as a symbol for the modern architecture and on the other hand grey fabric with green details as a reminiscence of park and nature. The atmosphere is changing from a stylish cool ambient into a warm and sunny afternoon by illumination.

# interior



# Mercedes-Benz Future Concept

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# exterior



'inside out'

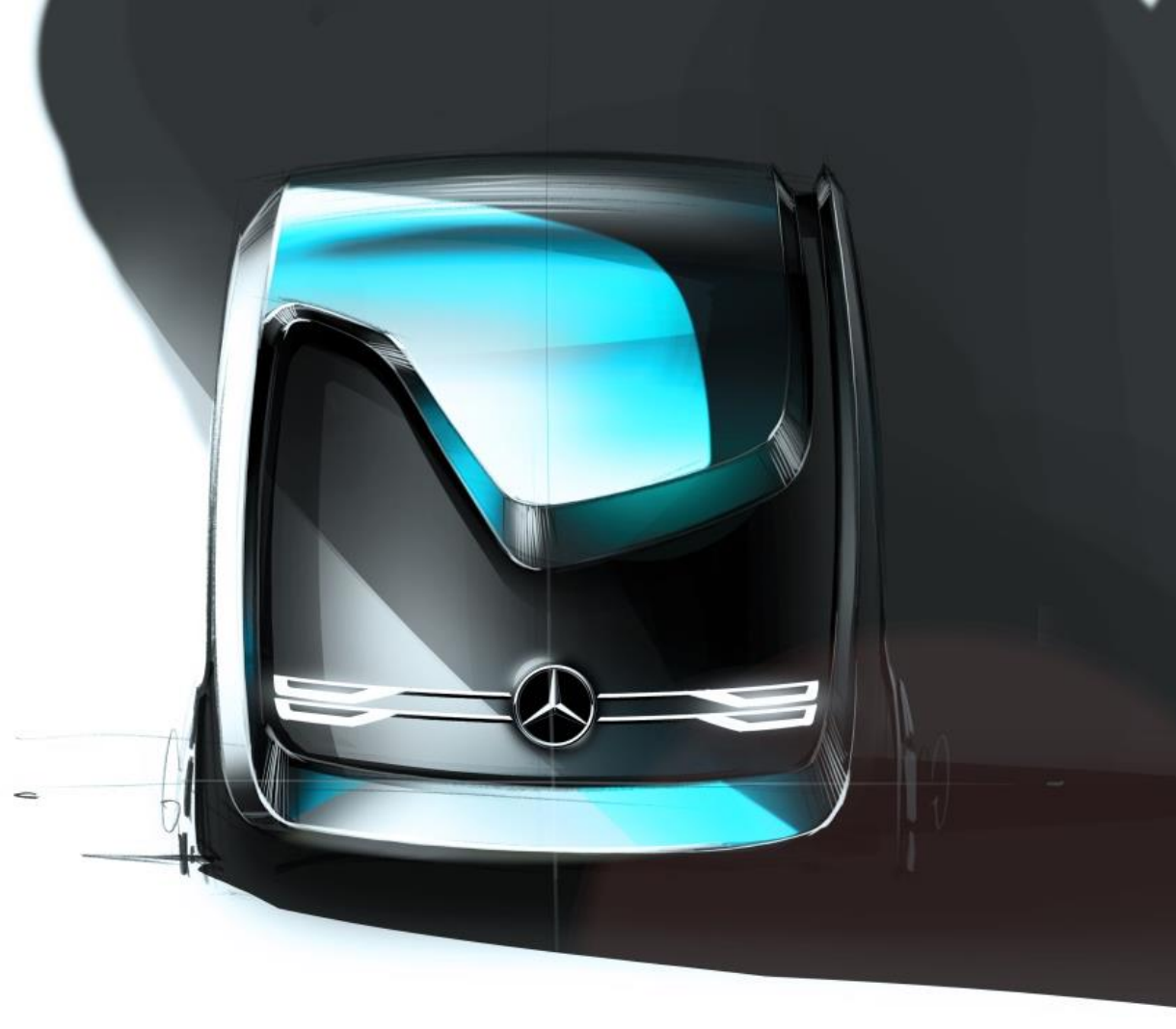
'autonomous driving'

'communication'

'passenger flow'

'architecture'

# exterior design theme



Strictly geometric graphic

Deep and black drawn windscreen appearance

The 'cooling mask' is not only a geometric part, it develops into a light sculpture and quotes the classic Mercedes-Benz commercial vehicle face

The roof runs into the upper windscreen which signals the reduced need for a visibility field because of autonomous driving.

At the co-driver area the bus still has a high windscreen for a better view out.

# exterior design theme



Strictly geometric graphic

Styling construction with a deep and black rear appearance

The rear lights in black surrounding are completing the C-pillar with the shape of bricks and look a little like the old ribbed rear lights.

The stripe between the rear lights forms a fundament and lets the bus look wide.

The rear end repeats the styling theme seen in the front.

# exterior design theme



Due to the interior arrangement, the body in white is asymmetrical.

On the left side you can see the 'zeppelin' which covers the information panel.

Main bodywork parts are on the driver side, so that maximum protection against other traffic partners is guaranteed.



***'asymmetric design - inside out'***



# exterior design theme



## ***'skyline'***

The side line reflects an abstract skyline of the city.

# exterior design theme



*'open space'*

With large windows the bus appears like modern public buildings.

Wide double doors are offering an optimized passenger flow.

All this provides the impression of a public area with high emotional elements.

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**light concept**

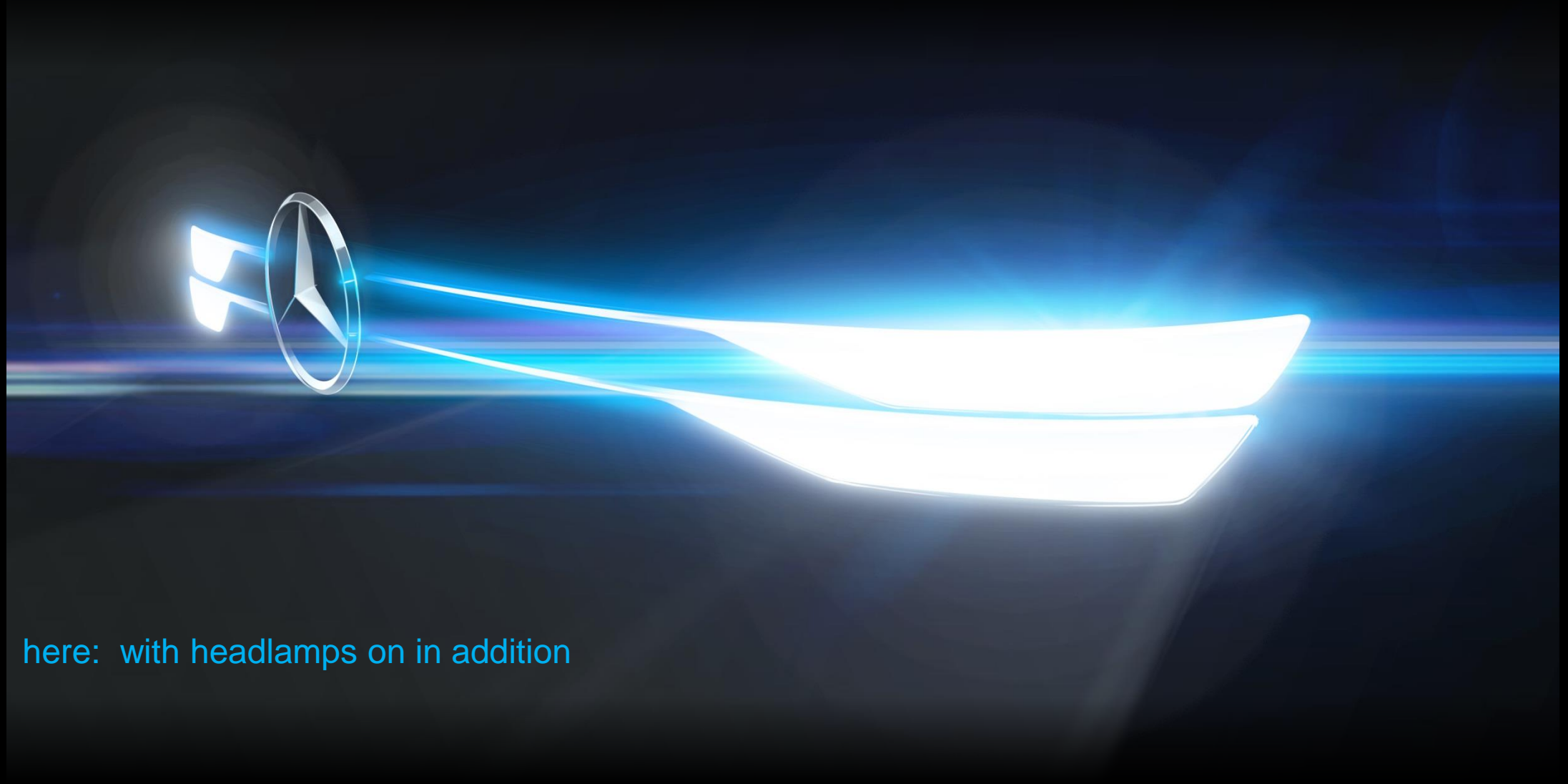


# exterior light concept



The headlamp design - with white or bluish stripes - communicates the current driving mode.

# exterior light concept



here: with headlamps on in addition

# exterior light concept



or with indicators on

# exterior light concept



connecting stripe is changing its color from white

A detailed rendering of the front of a Mercedes-Benz bus, focusing on the lighting design. The image shows the Mercedes-Benz logo on the grille, the headlights, and a prominent light strip that runs along the side of the bus. The light strip is illuminated with a bright yellow and orange glow, suggesting a dynamic lighting effect. The background is dark, making the illuminated parts of the bus stand out.

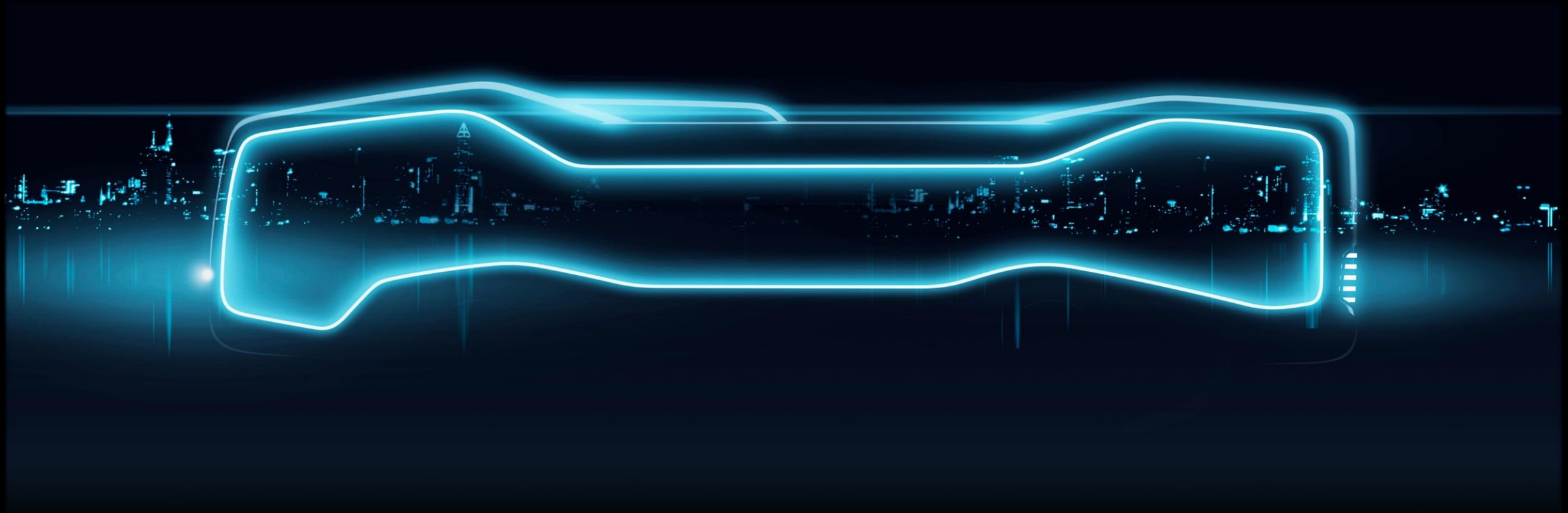
# exterior light concept

into blue



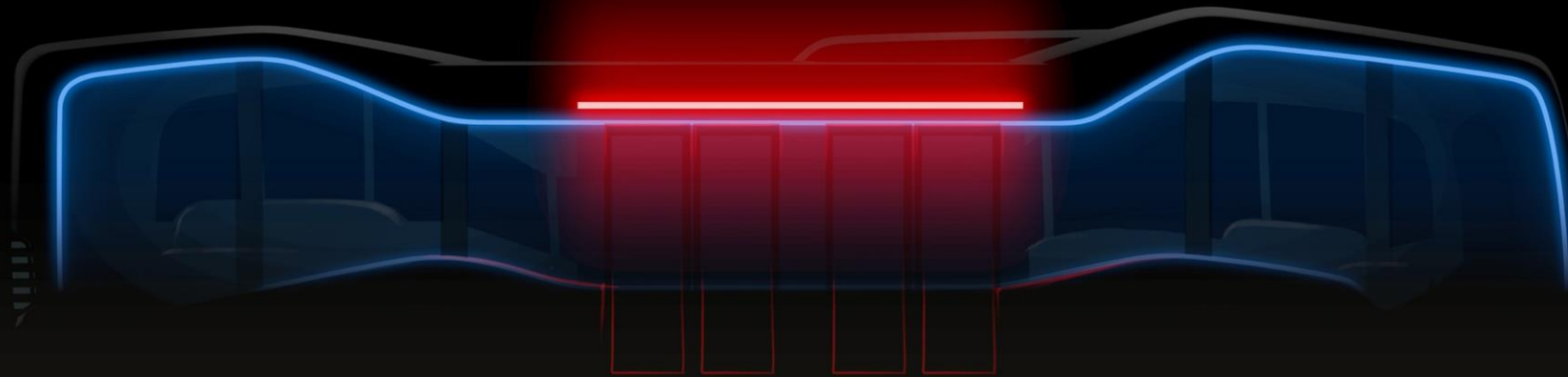


# exterior light concept



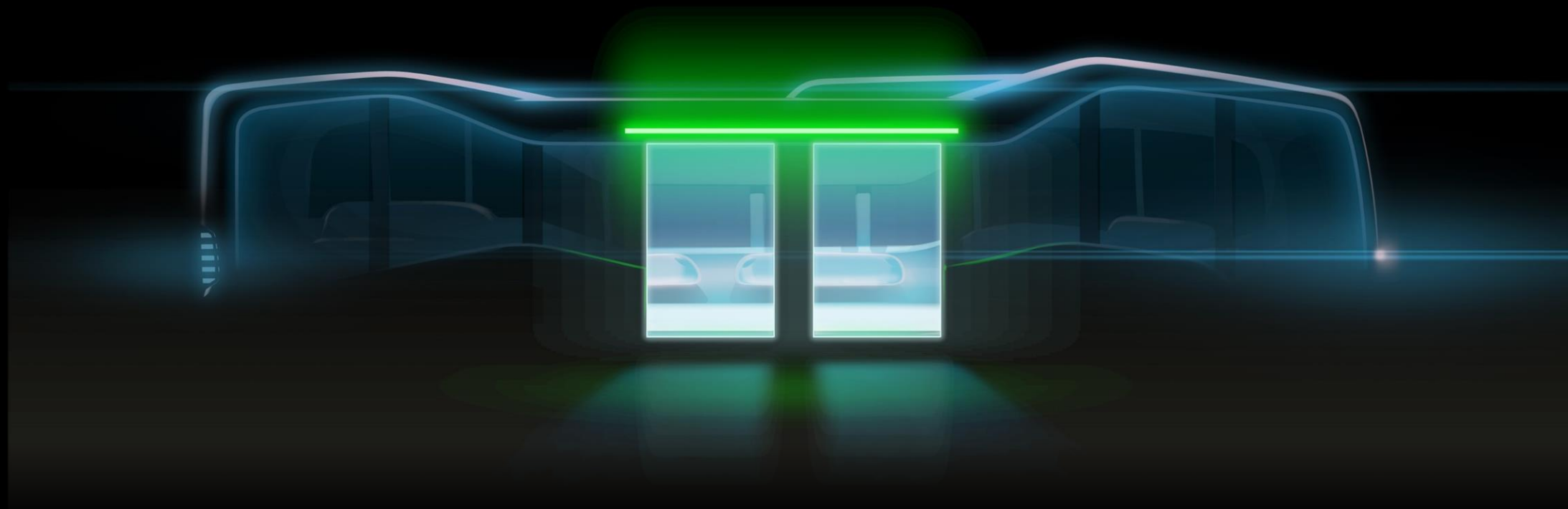
We are using blue light also for the sidewall to show the current driving mode.

# exterior light concept



There is a signal light on top of the doors for an optimized passenger flow.

# exterior light concept

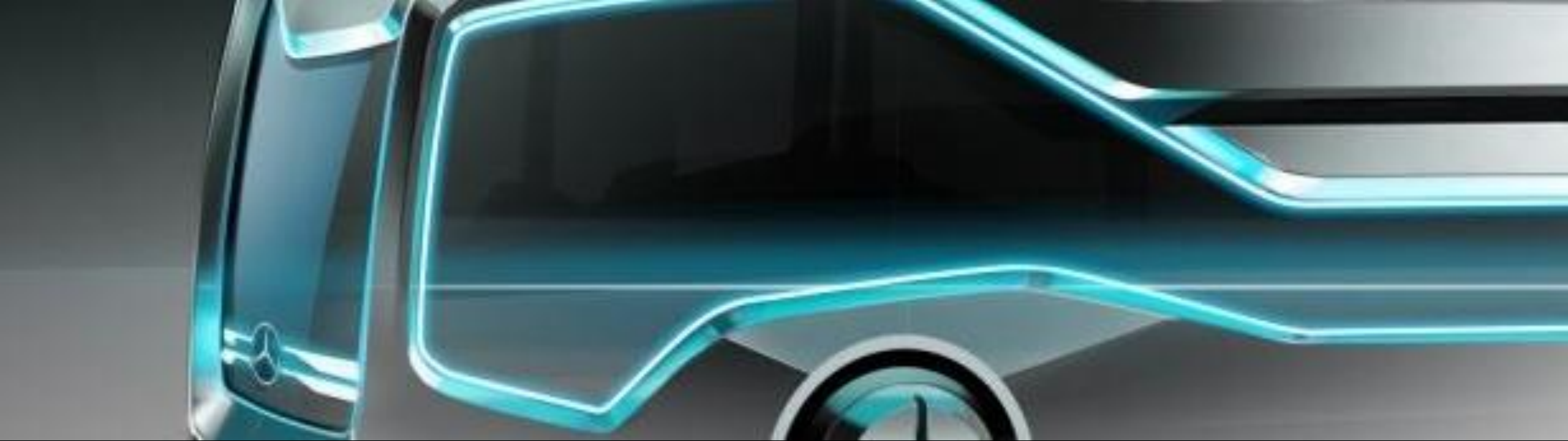


# exterior light concept



# exterior light concept





¡Muchas gracias por su atención!



Mercedes-Benz  
The standard for buses.