



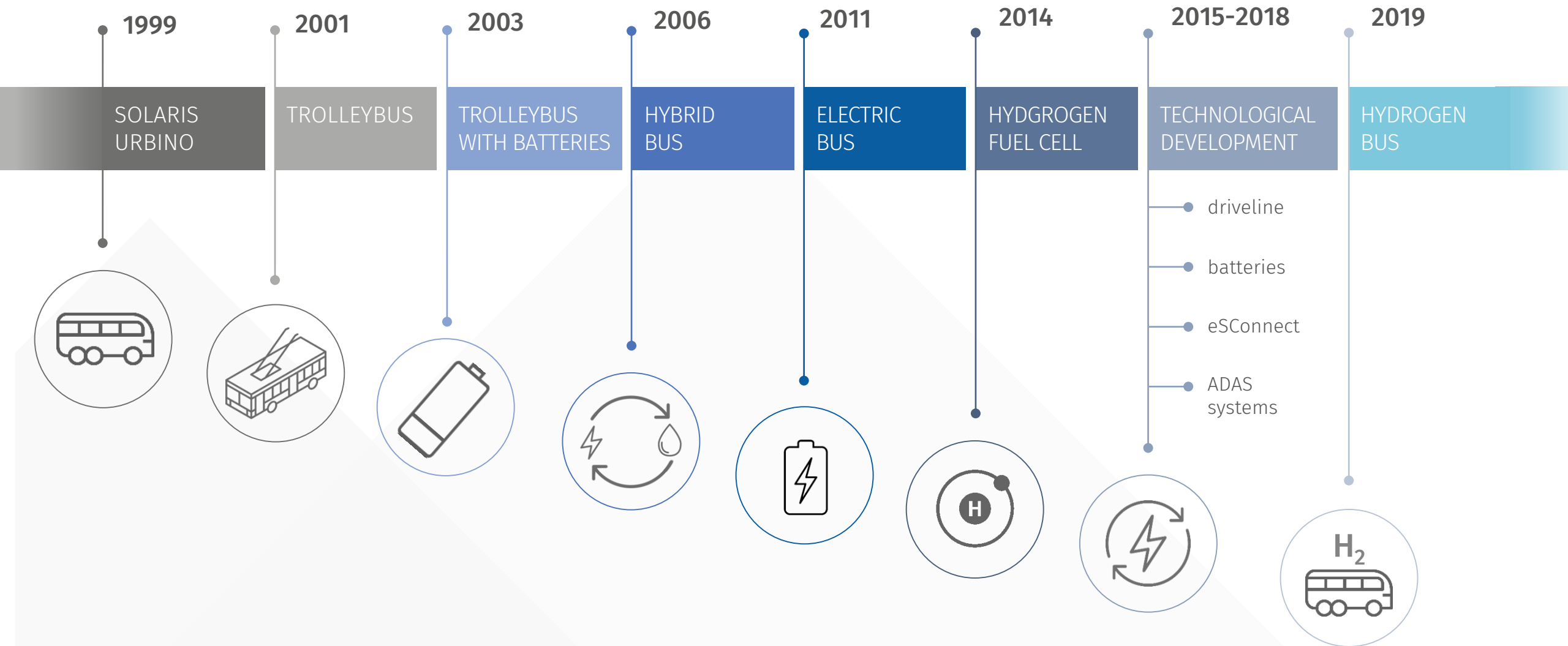
Bi-articulated **trolleybus and super-trolley** concept

12.11.2020



Maciej Sosnowski
PowerTrain Senior Manager

Development path towards **electromobility**

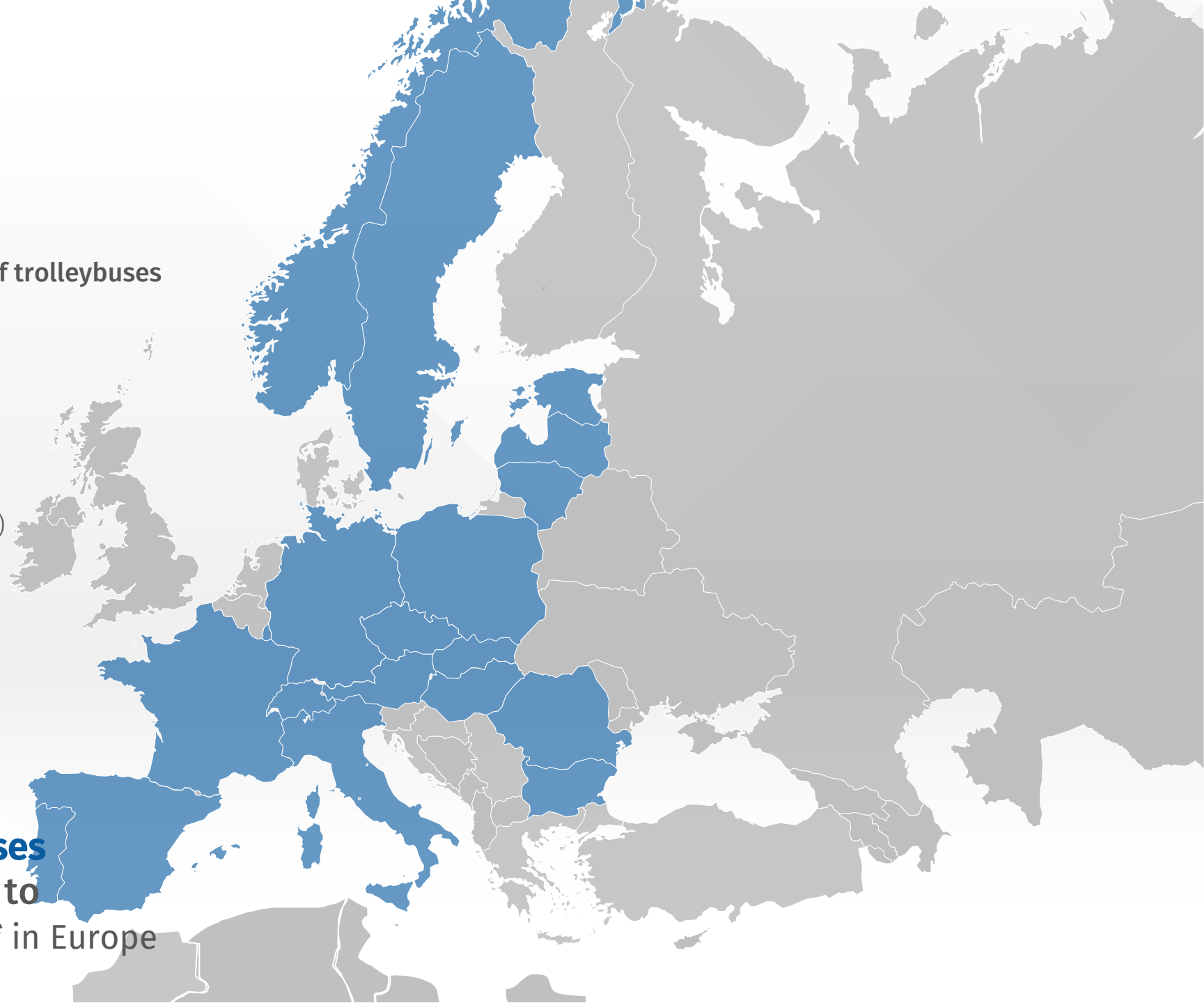


Experience

- Solaris is the number 1. **manufacturer of trolleybuses in EU and EFTA states** – 40% share
- Experience in the assembly of trolleybuses since **2001**
- **3 vehicle lengths** (12, 18 and 24 m)
- 4 partners for **electric fittings** (Škoda, Medcom, Cegelec, Kiepe Electric)
- **18 markets**
- **52 cities**

1629 trolleybuses delivered to **18 states*** in Europe

* as of 30.09.2020



Experience

Czech Republic	319
Lithuania	213
Bulgaria	208
Poland	184
Latvia	162
Italy	128
Romania	102
Hungary	94
Austria	66
Estonia	51
Slovakia	29
Germany	26
Switzerland	17
France	10
Norway	8
Spain	6
Sweden	5
Portugal	1



Solaris

Trollino 24

THE WORLD PREMIERE

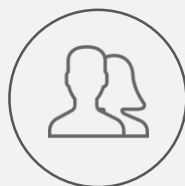
busworld.
EUROPE **BRUSSELS**

2019



Innovative

Batteries charged during the drive,
two traction motors propelling two drive axles



Exceeded capacity

Up to 215 passengers



Universal platform

For electric and trolleybuses



MetroStyle

Cutting-Edge design for BRT



Trollino 24

Technical data



DIMENSIONS

L: 24 700 mm, W: 2550 mm, H: 3450 mm

GVW (Gross Vehicle Weight)

38,000 kg

FRONT OVERHANG

2700 mm

REAR OVERHANG

2750 mm

WHEELBASE

5900 / 6000 / 7350 mm

AXLES

1st: independent axle

2nd & 3rd: portal axle

4th: rigid axle, electrohydraulic steering

RSS - reversing support system



Technical data

TROLLINO 24

BATTERIES	option
CHARGING	IMC, plug-in
ELECTRIC MOTOR	2 X 160 kW
MAXIMUM SPEED	up to 70 km/h
AC, HEATING	AC with electric compressor (3 x 400 V) Electric heater, electric
PASSENGER CAPACITY	Up to 215
SEATS	53 (14 – pedestal free)





Cameras
instead of
mirrors



Driver support systems and autonomous solutions significantly increase the safety and comfort of life for city residents



MirrorEye



MobilEye

- MirrorEye
- MobilEye with Forward Collision Warning (FCW)/Pedestrian Collision Warning (PCW)/Lane Departure Warning (LDW) functionality
- Light & Rain sensor
- Reverse camera and 3rd car monitoring cameras

New
product



Solaris
Trollino 12 electric

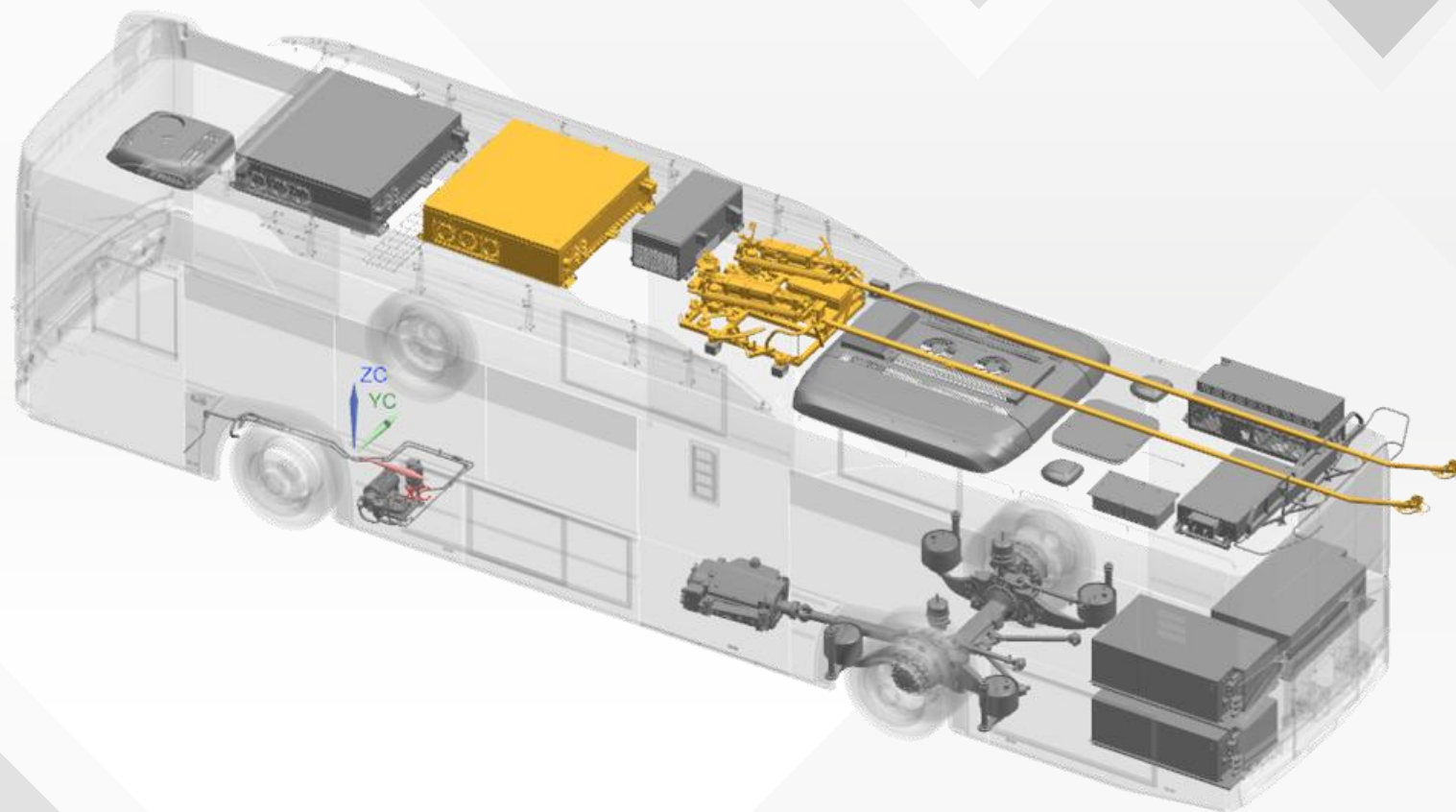


Solaris Trollino 12 electric

Synergy of trolley and e-bus

E-bus equipment

Trolley equipment



Trollino 12 electric

Przedsiębiorstwo Komunikacji Trolejbusowej



Gdynia, Poland

6 x Trollino 12 electric
synergy of trolley and e-bus



IMC charger:
150kW double insulated



Solaris High Power
batteries with
capacity of 87 kWh



Electric motor
central motor
160 kW



E-bus
driveline



Trollino changes the image of public transport



Trollino 12
KAUNAS (LT)

85x



Trollino 12
MILANO (IT)

80x



Trollino 18
BRASOV (RO)

26x

First Trollino in Norway

10
units

Keolis Norge AS ordered
10 Trollino 18 in 2019

Dec

Official launch of all new
trolleybuses is planned
for beginning of December 2020

11
km

Over 11 km distance
without catenary system





Any
questions?