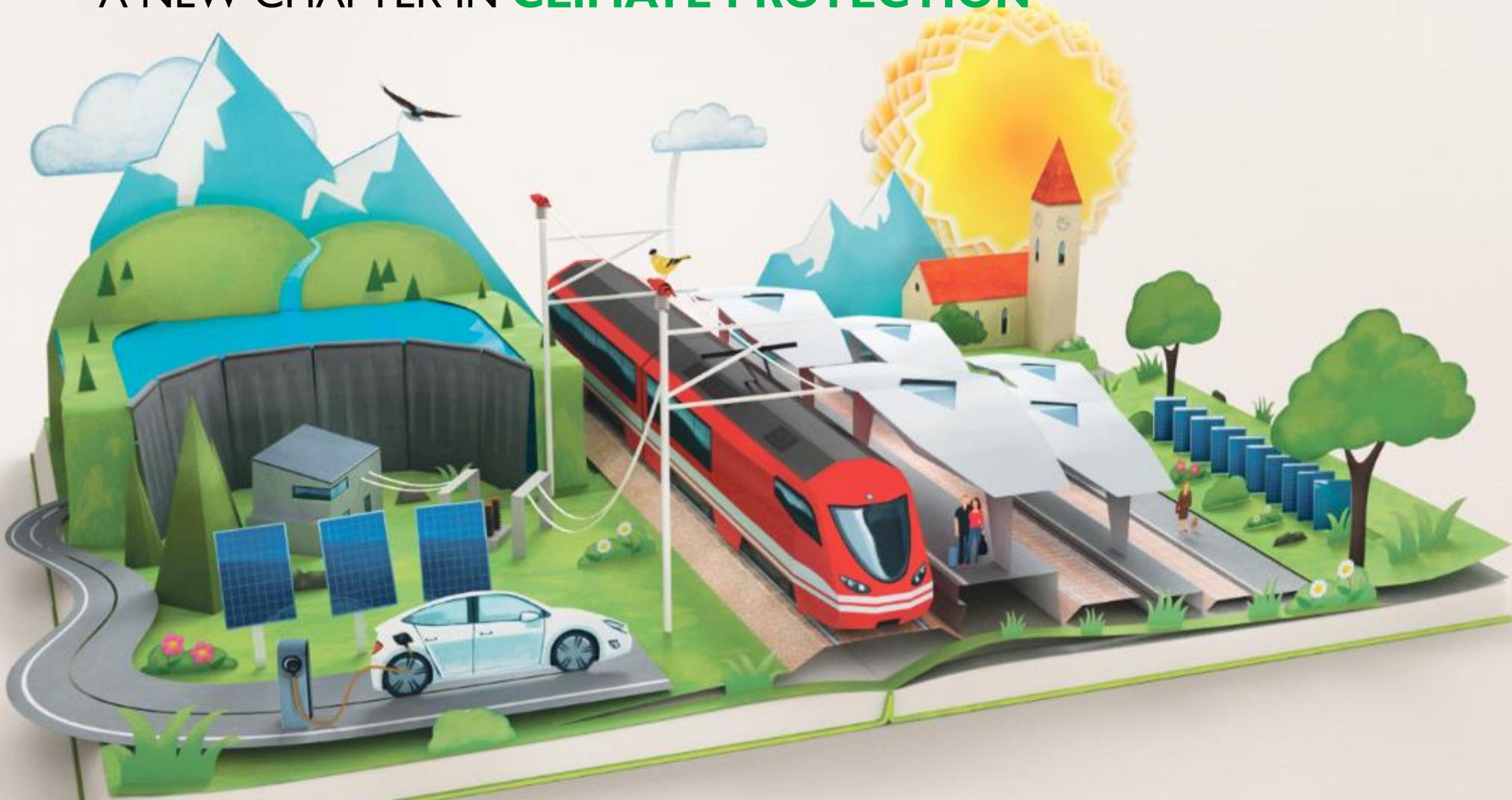


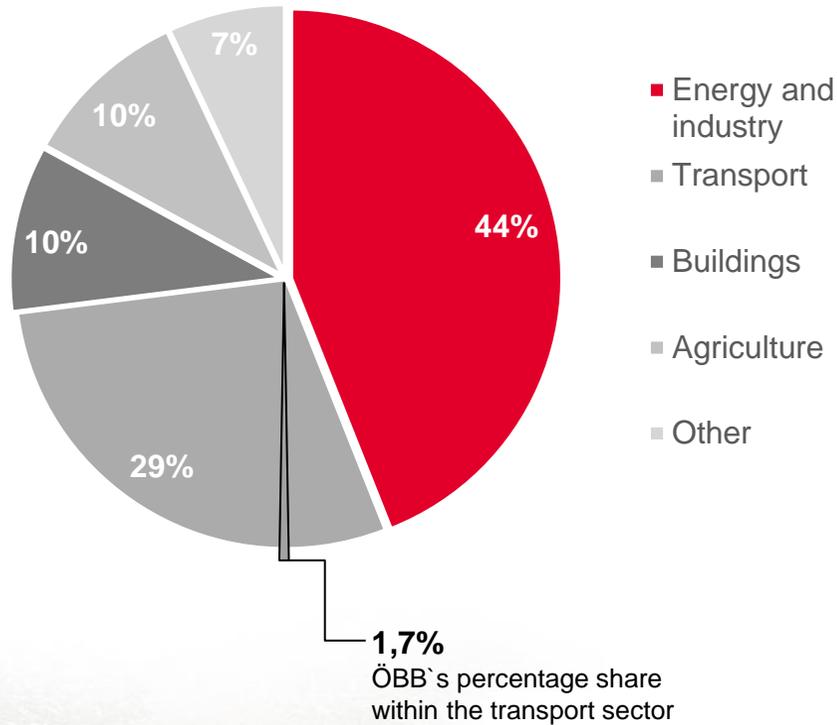
A NEW CHAPTER IN **CLIMATE PROTECTION**



# OUR EFFORTS COUNTER THE GROWING GHG EMISSIONS

## RAILWAY TRANSPORT IS EFFICIENT AND CLIMATE-FRIENDLY

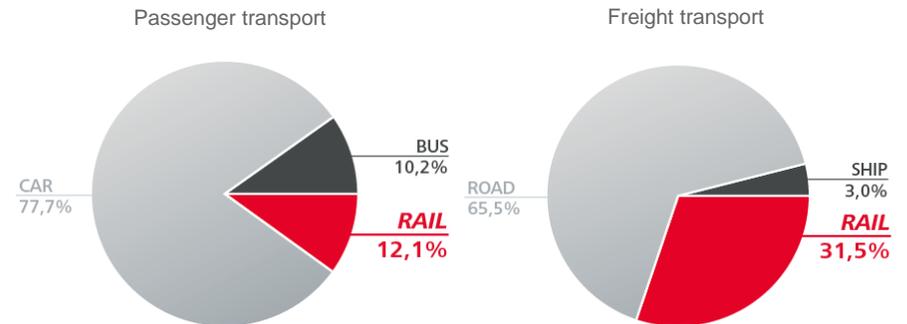
**GHG Emissions in Austria by Sector**



**ENERGY DEMAND**  
of transport (rail, road, water)



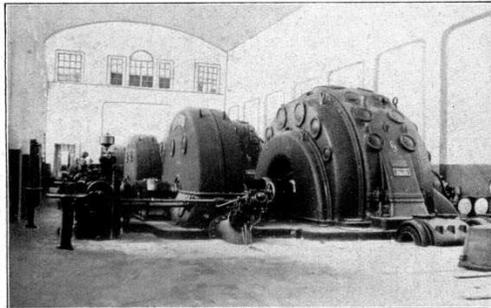
**MODAL SPLIT**  
in Austria



## ELECTRICITY SUPPLY OF RAILWAY TRACTION AND RENEWABLE POWER GENERATION IN AUSTRIA ARE CLOSELY LINKED

**1919**

Large-scale  
electrification  
of railway lines  
starts



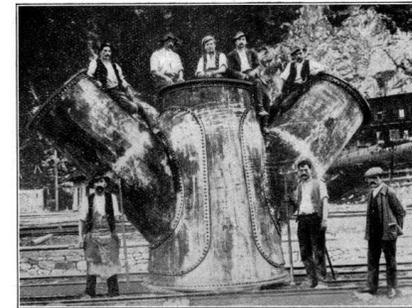
**1920s**

ÖBB's first own  
hydropower  
stations



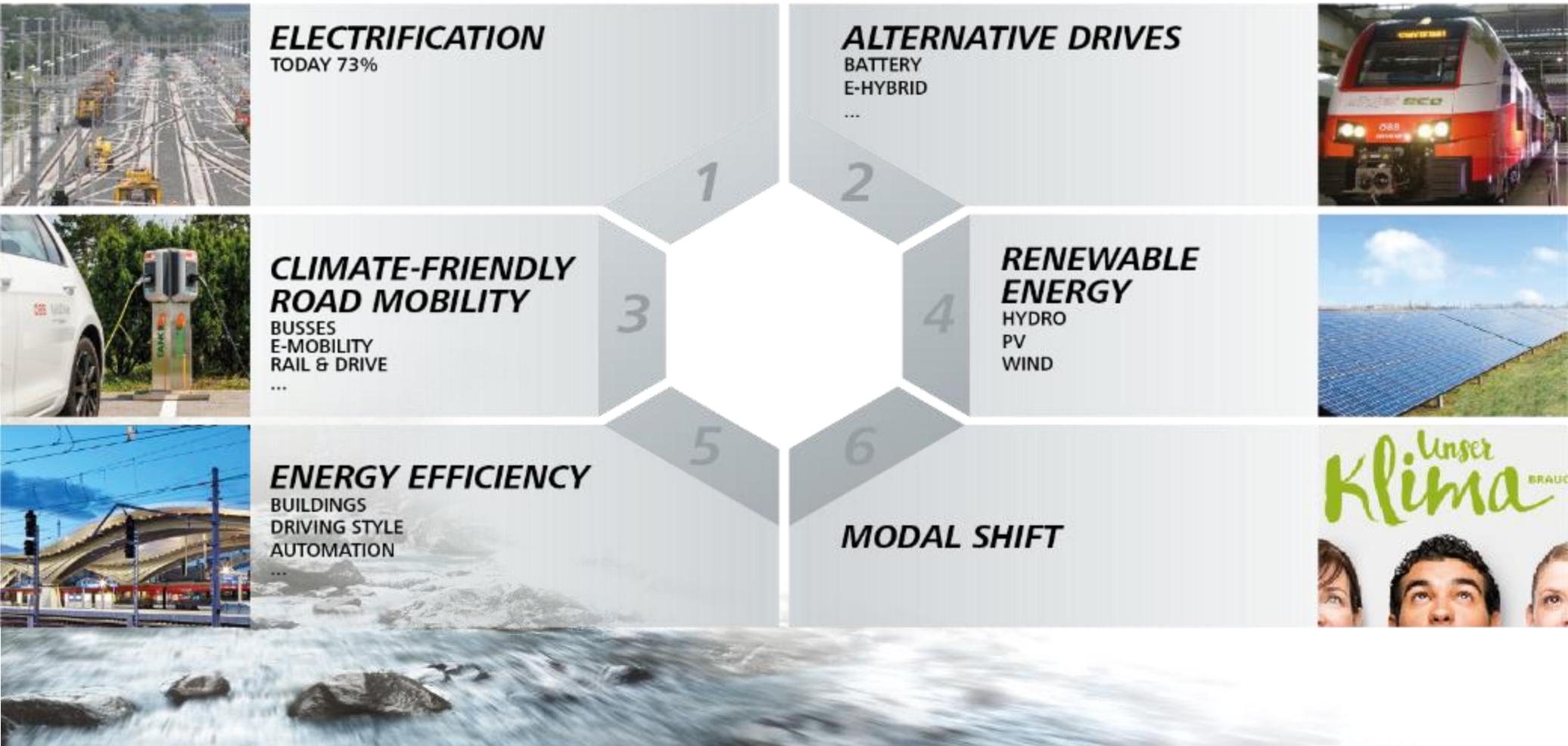
**1930**

electric traction  
from Salzburg  
to Bregenz

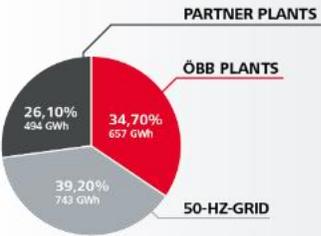


**2018**

4800 km of  
railway lines,  
73% electrified

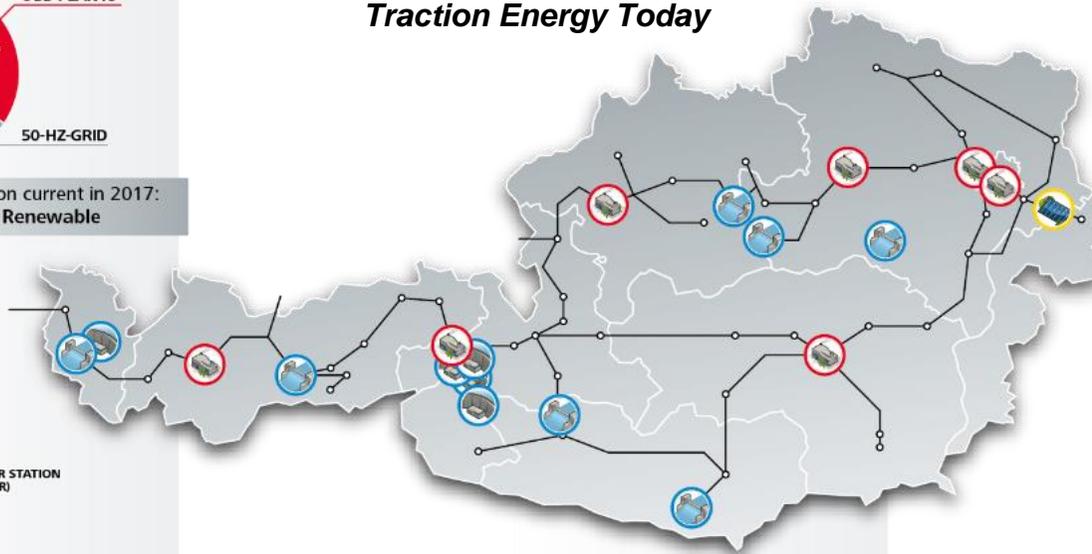


# TRACTION ENERGY TODAY & VISION FOR THE FUTURE



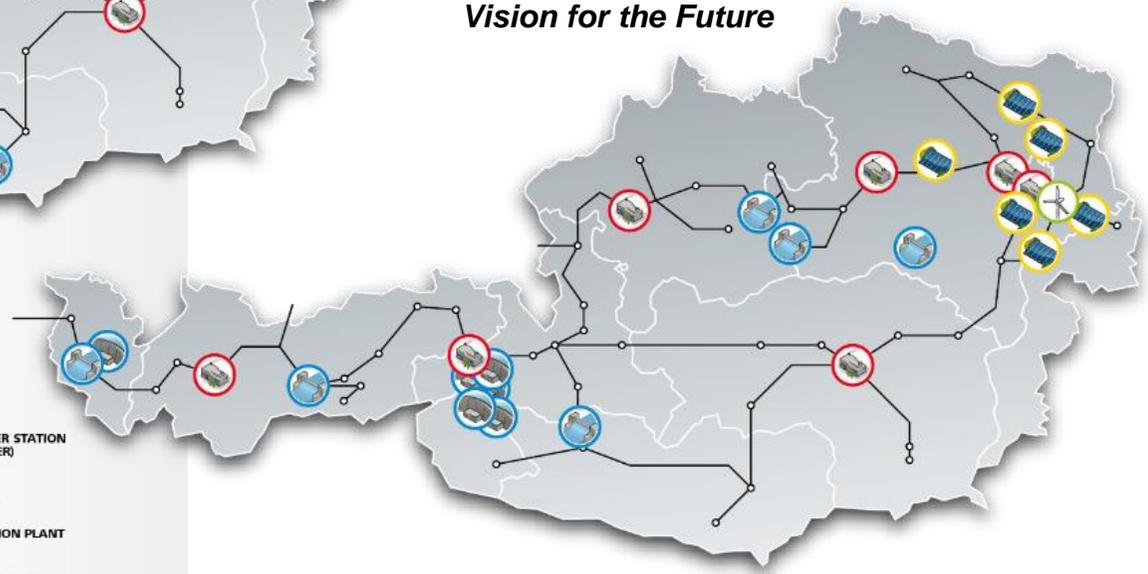
Total use of traction current in 2017:  
1894 GWh, 92% Renewable

## Traction Energy Today



- HYDROPOWER STATION (ÖBB/PARTNER)
- FREQUENCY CONVERTER
- PV GENERATION PLANT
- TRACTION CURRENT GRID (16,7 HZ, 110 KV)

## Traction Energy: Vision for the Future



- HYDROPOWER STATION (ÖBB/PARTNER)
- FREQUENCY CONVERTER
- PV GENERATION PLANT
- WIND POWER PLANT
- TRACTION CURRENT GRID (16,7 HZ, 110 KV)