

# TALGO, ENVIRONMENTALLY FRIENDLY TRANSPORTATION SYSTEM



MINSK, 15-16 - 03 - 2010

*Talgo*

# TALGO, ENVIRONMENTALLY FRIENDLY TRANSPORTATION SYSTEM

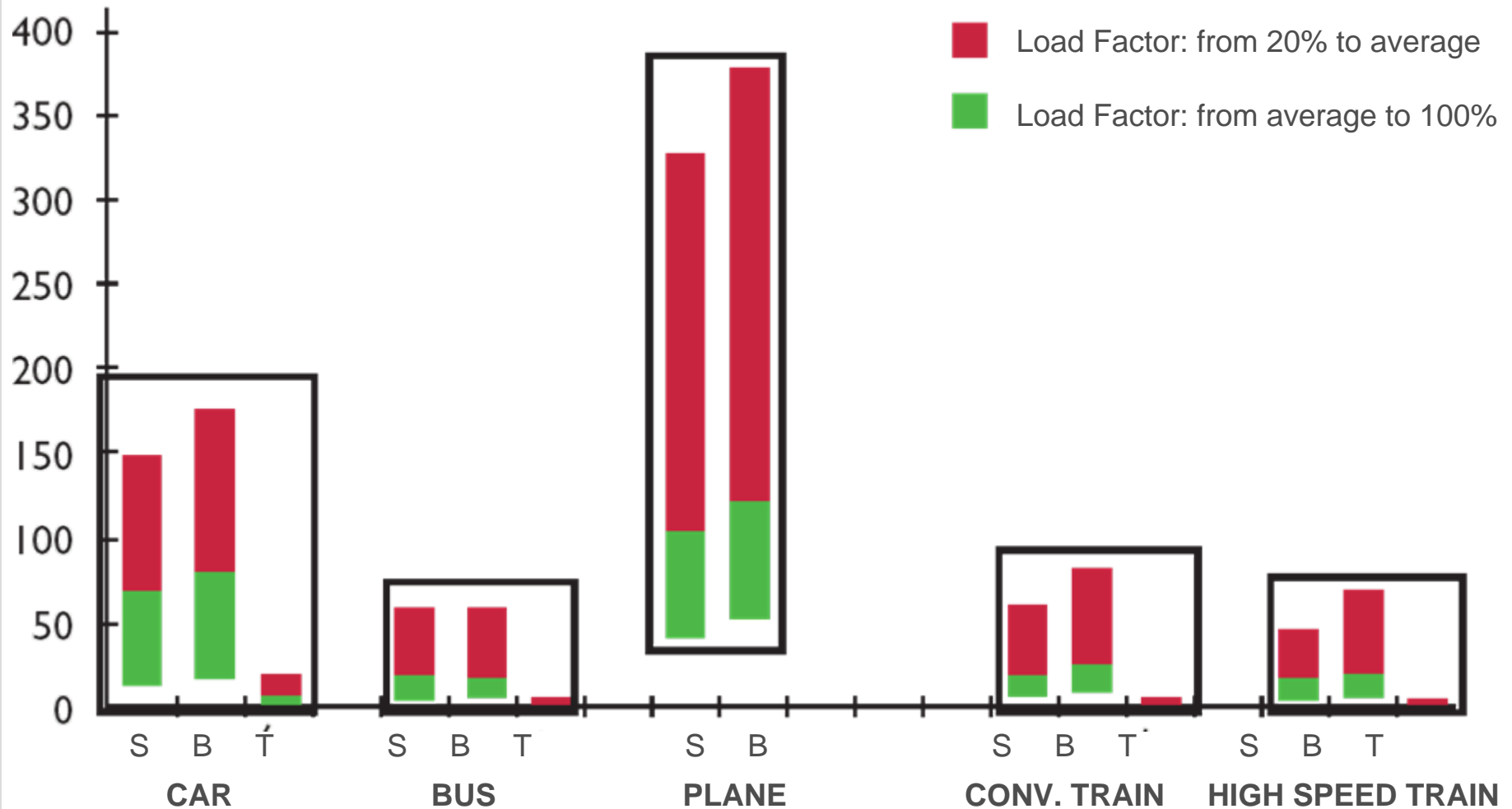
## CO2 EMISSIONS & CONSUMPTION

- ✓ PLANE
- ✓ BUS
- ✓ CAR
- ✓ CONVENTIONAL TRAIN
- ✓ HIGH SPEED TRAIN

## 3 ITINERARIES COMPARED

- ✓ **T:** MADRID – TOLEDO (Railway distance: 75,1km)
- ✓ **S:** MADRID – SEVILLA (Railway distance: 470,5km)
- ✓ **B:** MADRID – BARCELONA (Railway distance: 627,2km)
- ✓ **Exactly the same start & end points of the itinerary** (Madrid: Plaza de Colón, Toledo: Zocodover Square, Barcelona: Cataluña Square, Seville: Colón Square)
- ✓ **Real data of consumptions of fossil fuels**
- ✓ **Real average load factor** (an analysis is also done with 100% and 20% load factor)

# EMISSIONS CO<sub>2</sub> (kg) PER PASSENGER



S: MADRID – SEVILLE

B: MADRID – BARCELONA

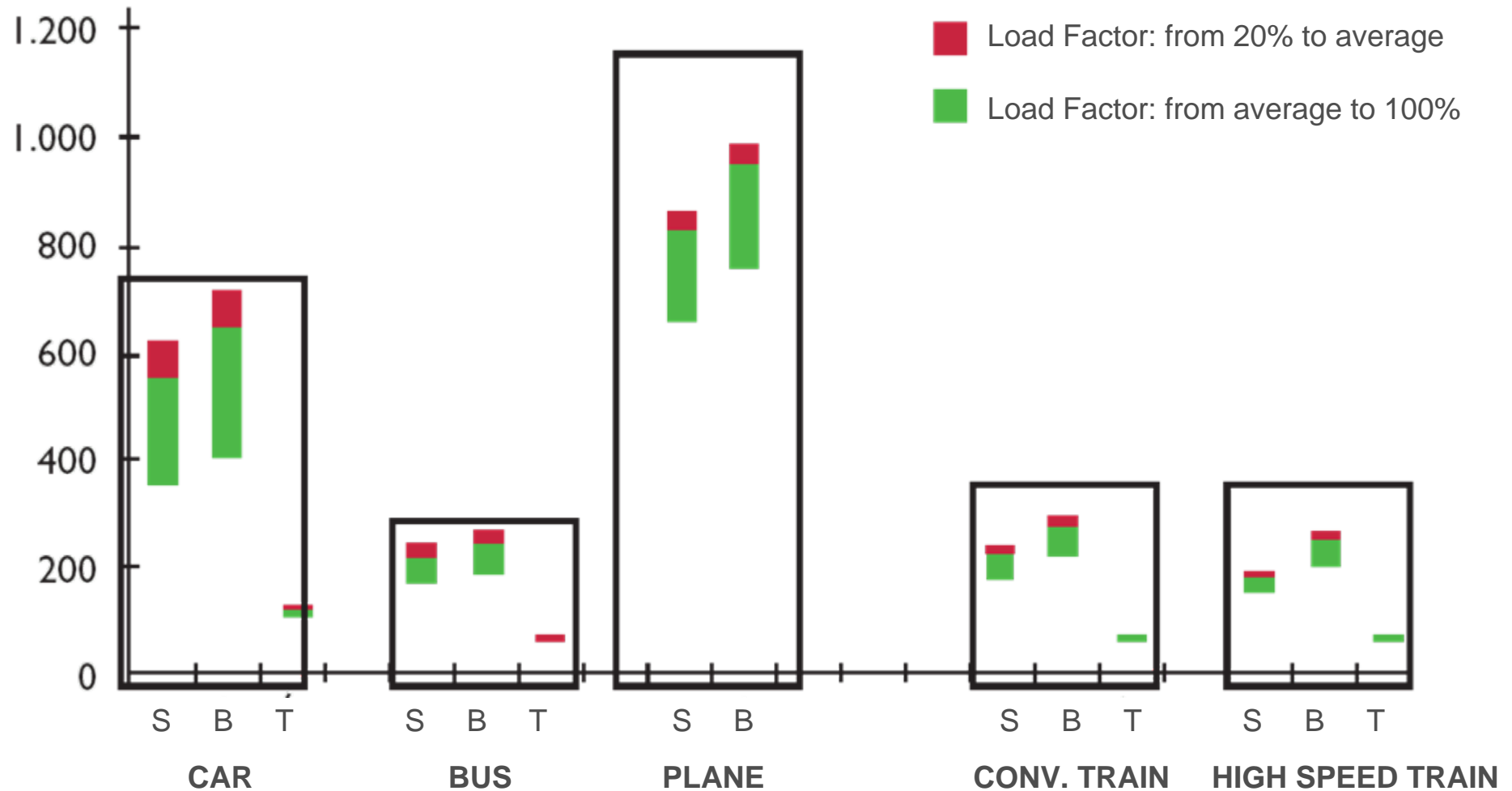
T: MADRID - TOLEDO

For more information please refer to:

*“Consumo de Energía y emisiones del tren de alta velocidad en comparación con otros medios de transporte – PHD Eng. Alberto GARCÍA*



# ENERGY CONSUMPTION (kWh) PER PASSENGER



S: MADRID – SEVILLE

B: MADRID – BARCELONA

T: MADRID - TOLEDO

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# TALGO ACTIVITIES AND PRODUCTS

## Design, manufacturing and maintenance of

- **Trains**

- ⇒ with or without integrated traction
- ⇒ day and night / hotel trains
- ⇒ for high speed traffic, long distance and for regional services

- **Equipment for the maintenance of railway vehicles**

- ⇒ Pith lathes
- ⇒ Diagnosis equipment for the measurement of the wheel parameters
- ⇒ Towing carts

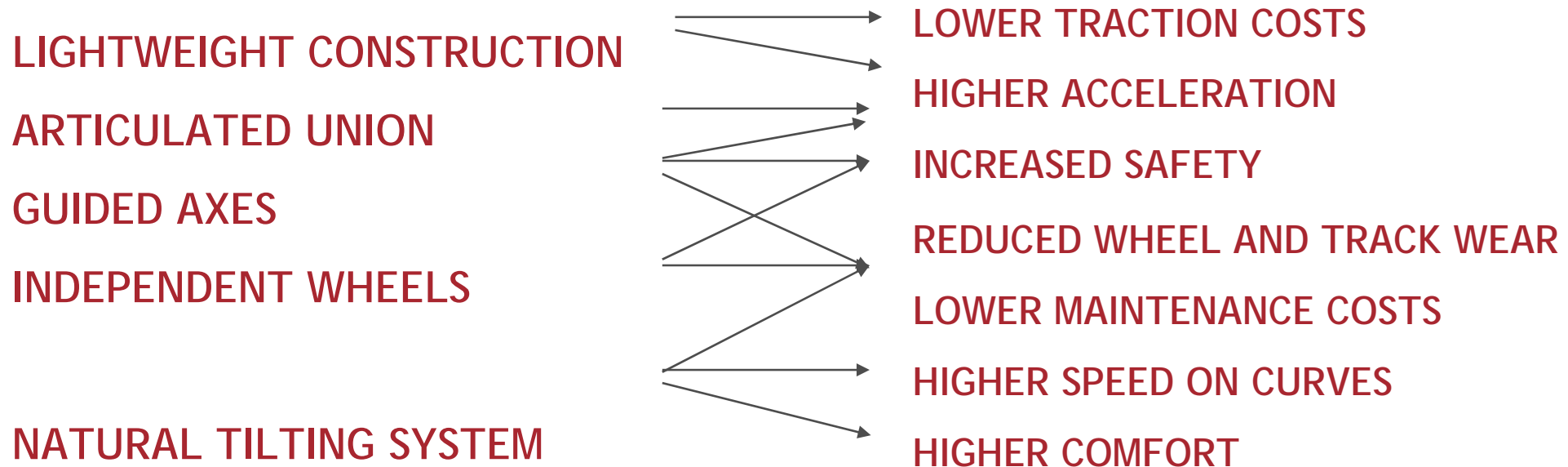
- **Automatic Gauge Change System Devices**

- ⇒ Passenger cars
- ⇒ Freight wagons
- ⇒ car carrying platforms
- ⇒ Traction units



# TECHNOLOGICAL PRINCIPLES OF THE TALGO TRAINS

## Advantages of the Talgo trains



# ***TALGO TRAINS COMPARED WITH THE REST:***

## THE BEST IN:

- NOISE EMISSIONS
- ACCESSIBILITY (550mm-760mm)
- INTERIOR SPACE
- NUMBER OF AXLES PER TRAIN
- FLEXIBILITY

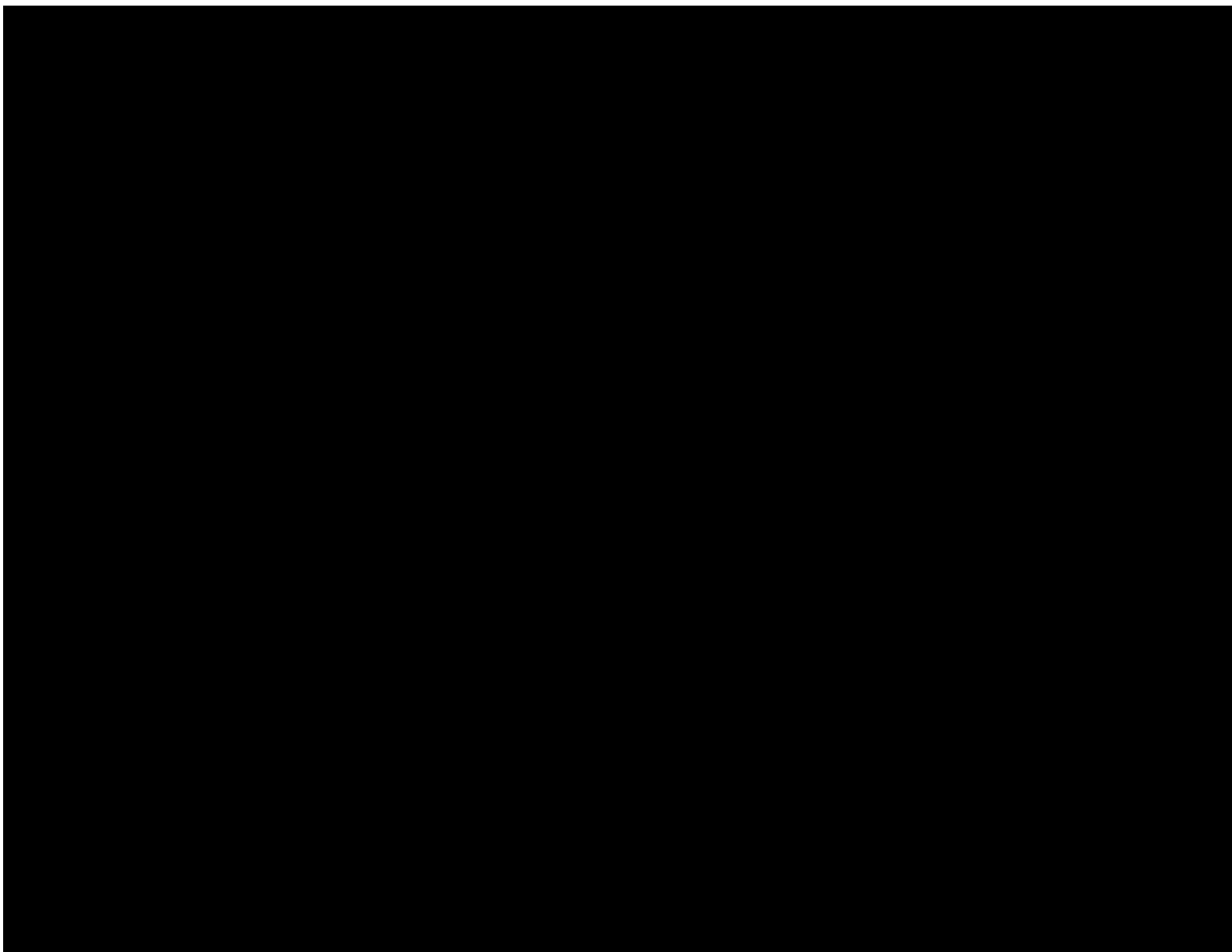
## ONE OF THE BEST IN:

- ENERGY CONSUMPTION PER SEAT
- RUNNING QUALITY AND BEHAVIOUR
- COMFORT FOR THE PASSENGERS
- VALUE ADDED SERVICES: MAINTENANCE



***Talgo***

# TECHNICAL PRINCIPLES OF TALGO TRAINS



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# Talgo

350



## CONCLUSIONS

- ✓ For medium and long distances, the railway is the environmentally sustainable transportation choice.
- ✓ TALGO Rolling Stocks are the Best in Class in Emissions & Energy consumptions thanks to their cutting edge technology.



# THANK YOU !!

We do not inherit the earth from our ancestors,  
we borrow it from our children.

- Native American Proverb