



# TUMI E-Bus Checklist

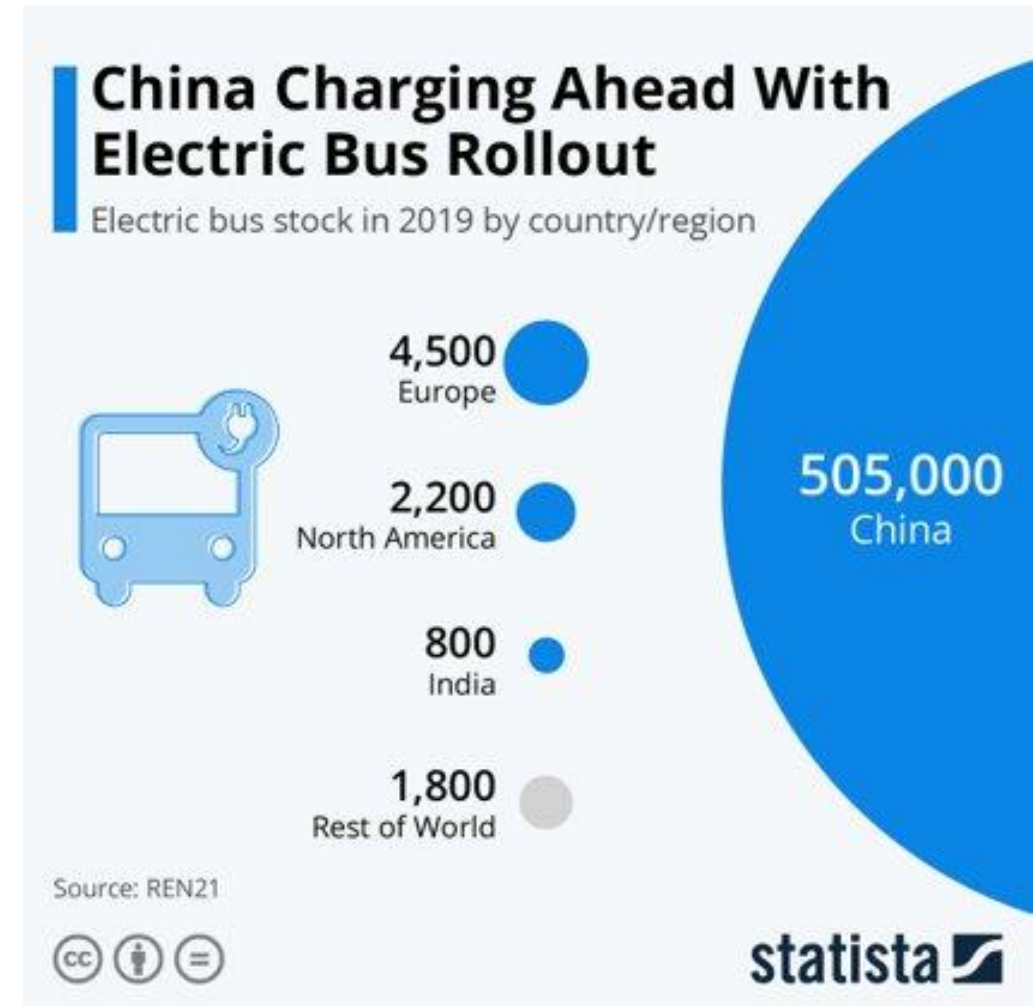
June 25, 2021



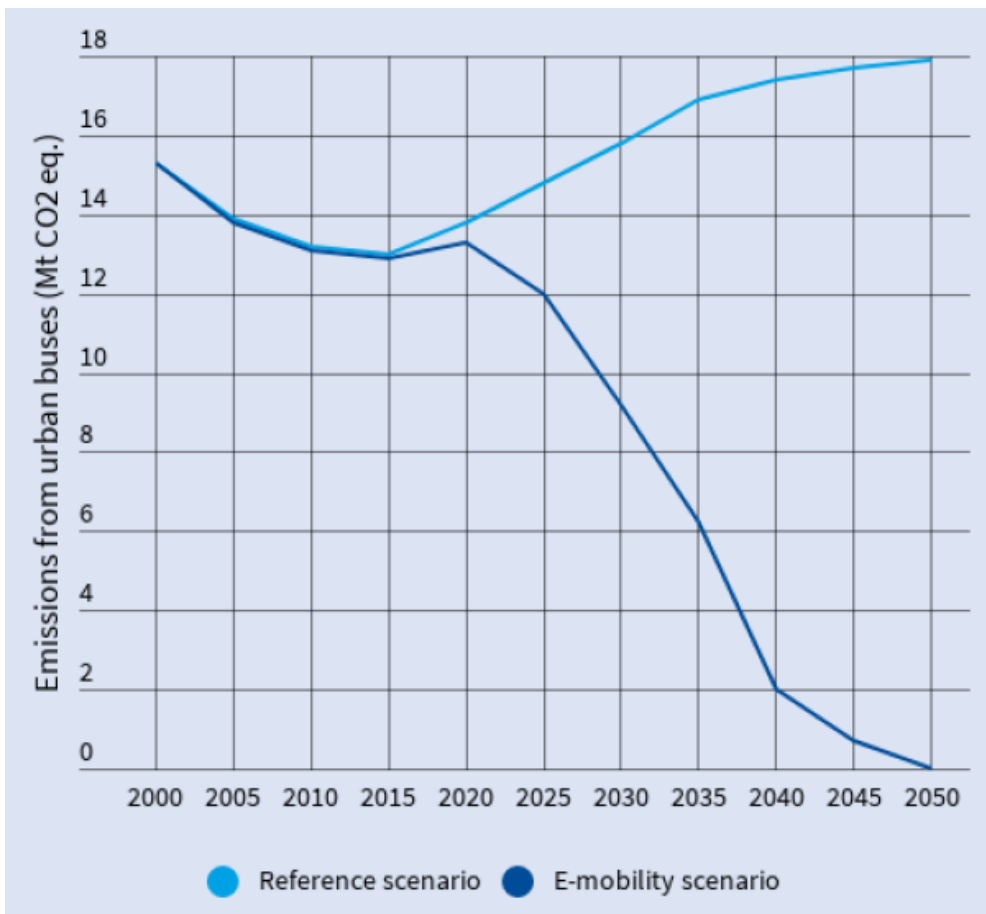
Only 16% of the Buses of the world are Electrified till date.

Number of electric buses  
**600k**

Source: BNEF

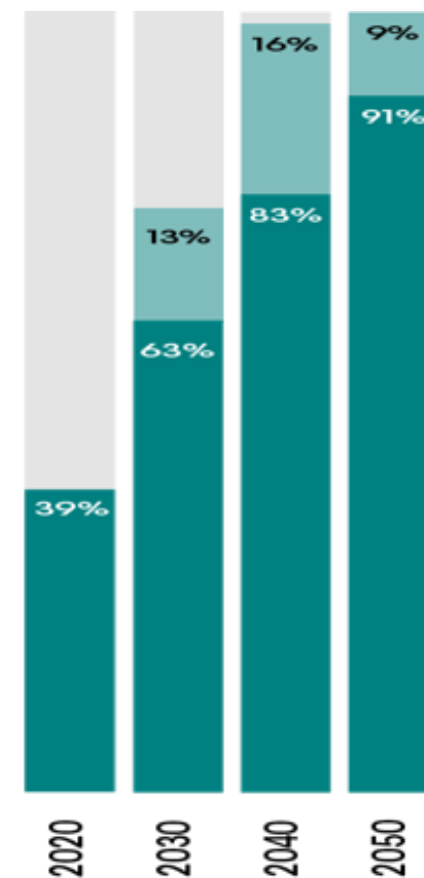


# E-Buses for net zero scenarios



Modelling of GHG from urban Buses in EU

Source: T&E



■ ZEB sales share (Economic Transition Scenario)

■ ZEB sales share (Net Zero scenario)

Source: EV Outlook 2021, BNEF |

## Key Stakeholders Involved



*Strategic*

**City Administrations /  
Transport Authorities**

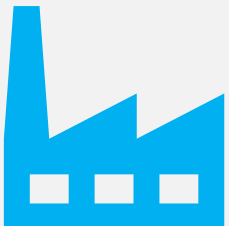
What do we want to  
achieve?



*Tactical*

**Public Bus Transit  
companies**

What services can  
help us to achieve the  
aims?

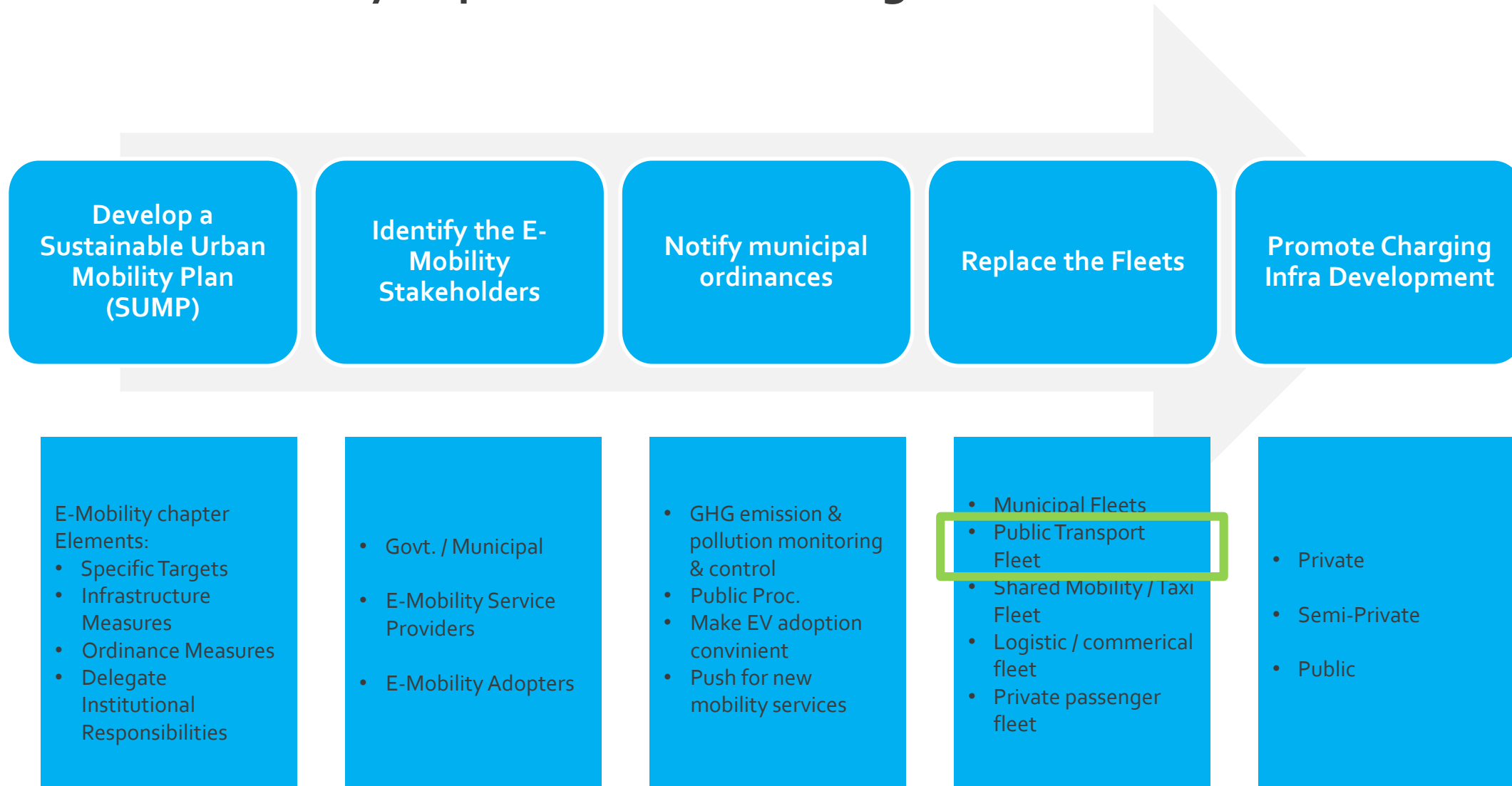


*Operational*

**Energy Suppliers/ E-  
Bus OEMs / CI. OEMs/  
Pvt. Bus Operators**

How do we  
produce/offer these  
services?

# Broad E-Mobility Expectations at Strategic Level



# Key Tasks for E-Bus Promotion

## Strategic

- Short term legally binding goals in line with national/city level environment standards
- Notify Standards
  - Emissions
  - Personnel & Commuters safety
  - Service
- Ensure resources availability
- Project Monitoring

## Tactical

- Technology selection (E-Buses & Charing Infra. (CI))
- Business Models & Fares
- Route Optimization
- Tendering Approach
- Industry Engagement
- Key Performance Indicators (KPIs)
- Operations Monitoring
- Ensuring Safety
- Reskilling & Upskilling
- Training need assessment

## Operational Level

- Ensuring sufficient power supply
- Vehicle & CI model availability
- TCO & Financing
- E-Bus Scheduling & involved risks
- Ensuring High Up time
- Ensure Optimum operation cost

**We need to Act Fast !!!**







# Are we doing Enough ???

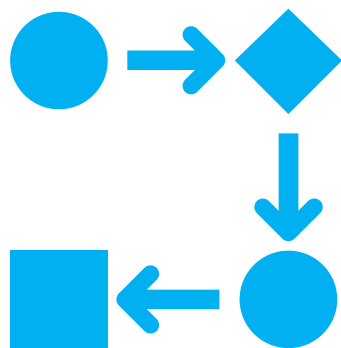
## World's population by size class of settlement, 2018 and 2030

Size class	2018			2030		
	Number of settlements	Population (millions)	Percentage of world population	Number of settlements	Population (millions)	Percentage of world population
Urban	..	4 220	55.3	..	5 167	60.4
10 million or more	33	529	6.9	43	752	8.8
5 to 10 million	48	325	4.3	66	448	5.2
1 to 5 million	467	926	12.1	597	1 183	13.8
500 000 to 1 million	598	415	5.4	710	494	5.8
Fewer than 500 000	..	2 025	26.5	..	2 291	26.8
Rural	..	3 413	44.7	..	3 384	39.6

Self Learning will be key at Strategic & Tactical Level !!

**Challenge Remains:** *Easy availability of comprehensive resources & condensed information for faster Implementation of E-Bus Projects.*

# TUMI E-BUS Checklist



9 Key Project Steps



Checklist of Key Tasks



Potential Stakeholders



Self learning Resources

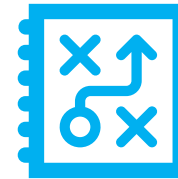
# TUMI E-BUS Checklist Resources



Laws & Policy  
Papers



Podcasts



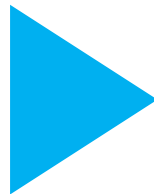
Roadmaps



Studies



Market  
Dialogues



Webinars

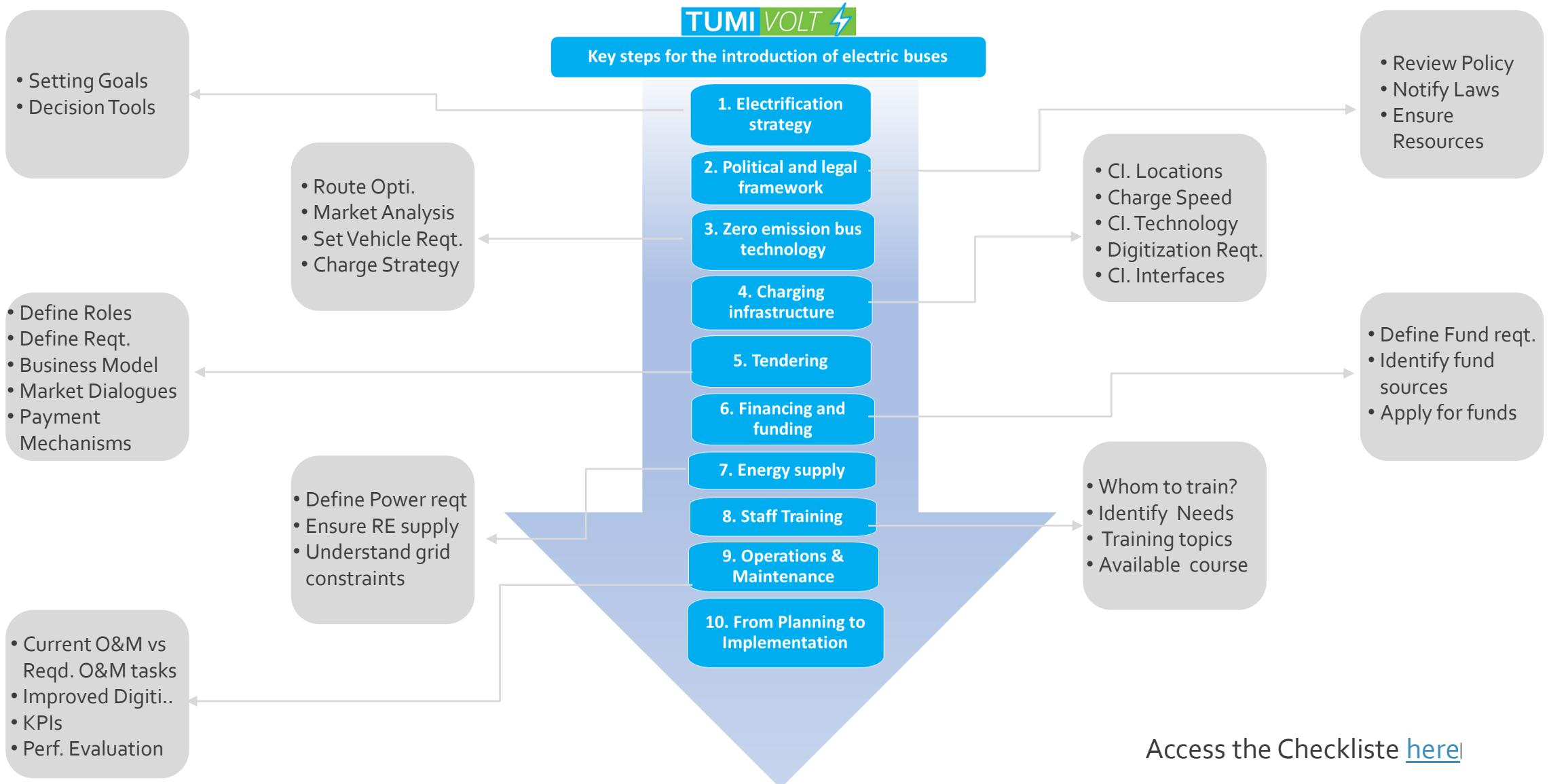


OEM Details



Training  
Courses

# TUMI E-BUS Checklist



Access the Checklist [here](#)

Thank you...



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