

Transizione nel trasporto pubblico pluralità tecnologica e pragmatismo

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Sommario

- Pragmatismo
- Le scelte possibili
- Le scelte di lungo periodo
- I modelli di autobus del progetto LNG e CNG
- Le infrastrutture di ricarica LNG-LCNG dei depositi Ferrarese (BO) e Trenti (FE)
- La composizione attuale della flotta tper spa per sistema di trazione
- Gli impianti
- Correlazione strategia ambientale, conoscenza e mercato servizi di manutenzione
- La chiave del cambiamento

«Consideriamo quali effetti, che possono avere concepibilmente conseguenze pratiche, noi pensiamo che l'oggetto della nostra concezione abbia.

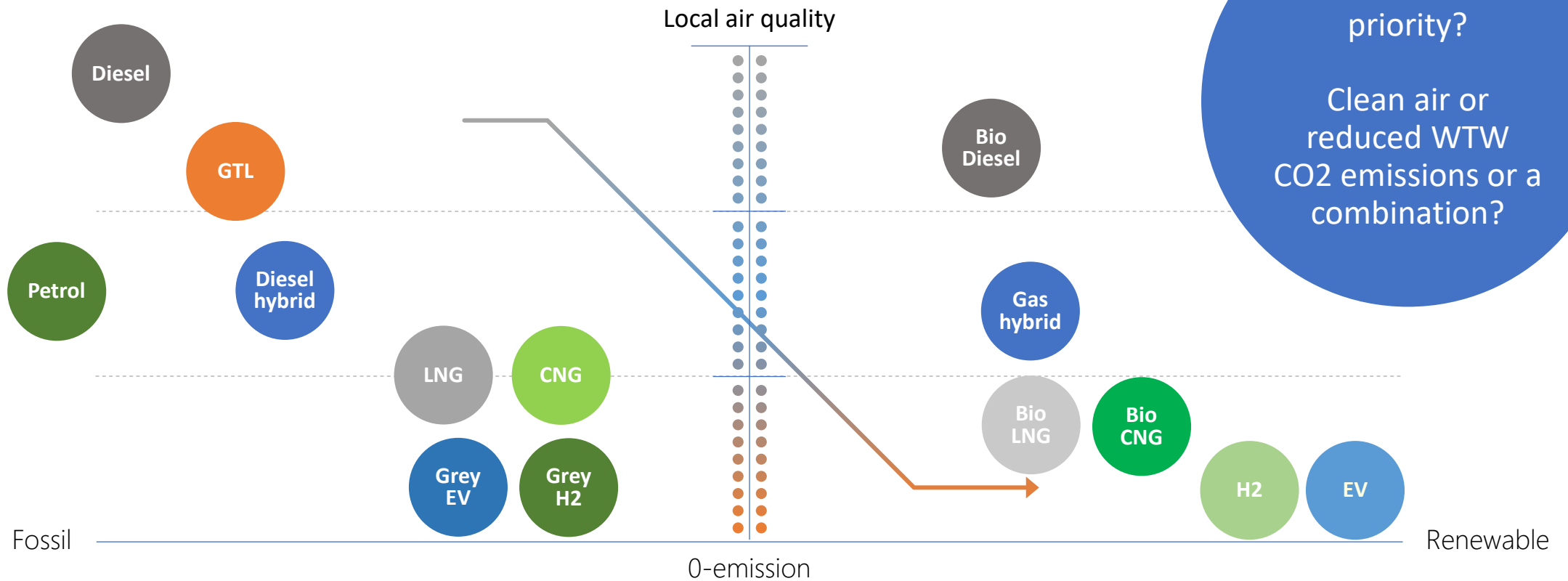
Allora, la concezione di questi effetti è l'intera nostra concezione dell'oggetto».

Come rendere chiare le nostre idee

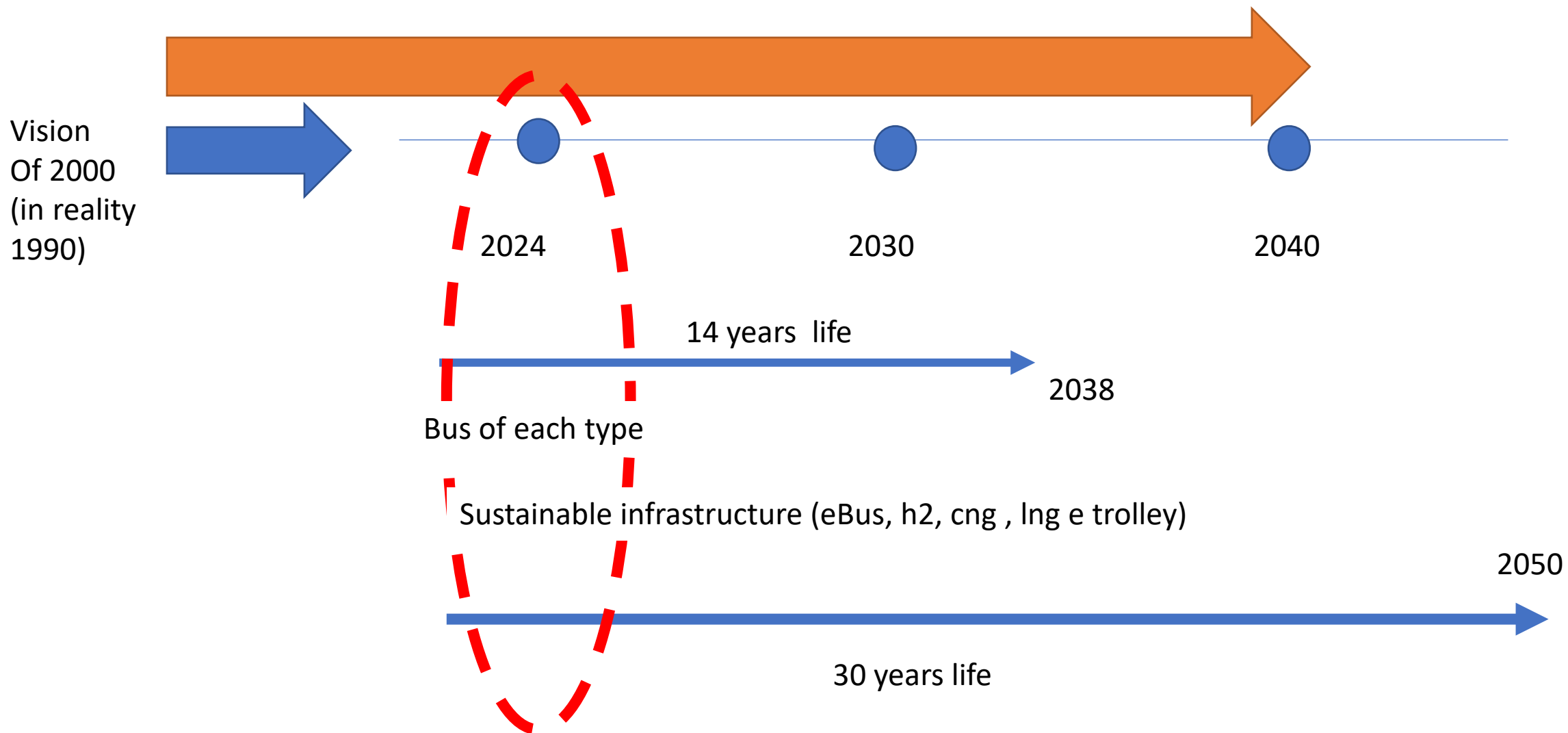
C.S.Peirce

Step a) determine goals

AND MAKE HIGH LEVEL SELECTION OF POSSIBLE FUEL SOLUTIONS



We are working now on the future !!!!



Mild hybrid module paired with a CNG-fuelled engine. In Italy **MAN Truck & Bus** has won the tender for the supply of 40 units of such kind of vehicle to TPER, public transport company of **Bologna**. The tender saw MAN winning over Mercedes, that offered the [Citaro NGT hybrid \(93 units of this are operating in Rotterdam's region\)](#).

MAN offered, for the first time, its **Lion's City with Efficient Hybrid** module in tandem with the **gas engine**. The [news has been reported on the Italian magazine Autobusweb](#).



MILD 12m HYBRID CNG MAN

Scania bus runs on LNG for the first time. A European premiere in Bologna

Scania bus LNG-powered has made its way to Bologna. The first LNG buses in Europe have been delivered in the Italian city. And this could set the beginning of a new era for intercity buses. The Scania bus Interlink LD LNG displayed today, the first batch of a 15-units order, will be operated by the public [...]

6 December 2019 by Editorial Staff



12m Scania LNG mid flor

Classe I
12m
LNG IIA
Low floor



Classe II
18m
CNG MAN
Low floor
Mild hybrid



Classe II
12m
LNG IIA
Low floor



©Alex2910 Bologna
Scania Irizar i4 LNG T>per 3223

Classe II
12m
LNG SCANIA IRIZAR
mid floor

Overnight – Opportunity balance for eBUS



12 m VDL BEB opportunity

9 m Eway Iveco overnight

18 m opportunity Karsan

Opportunity charging

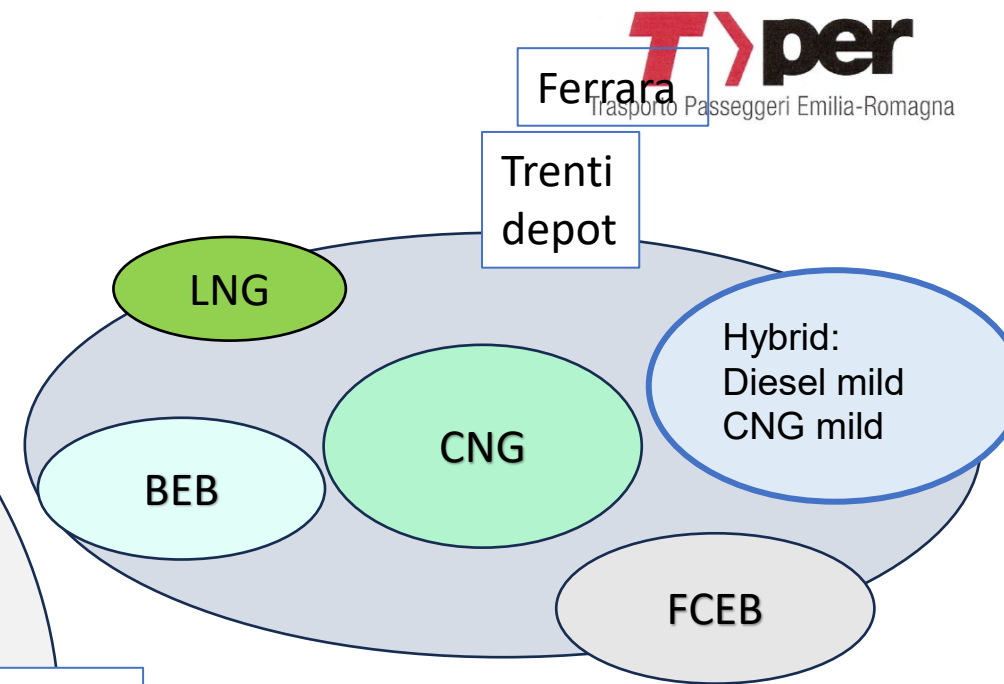
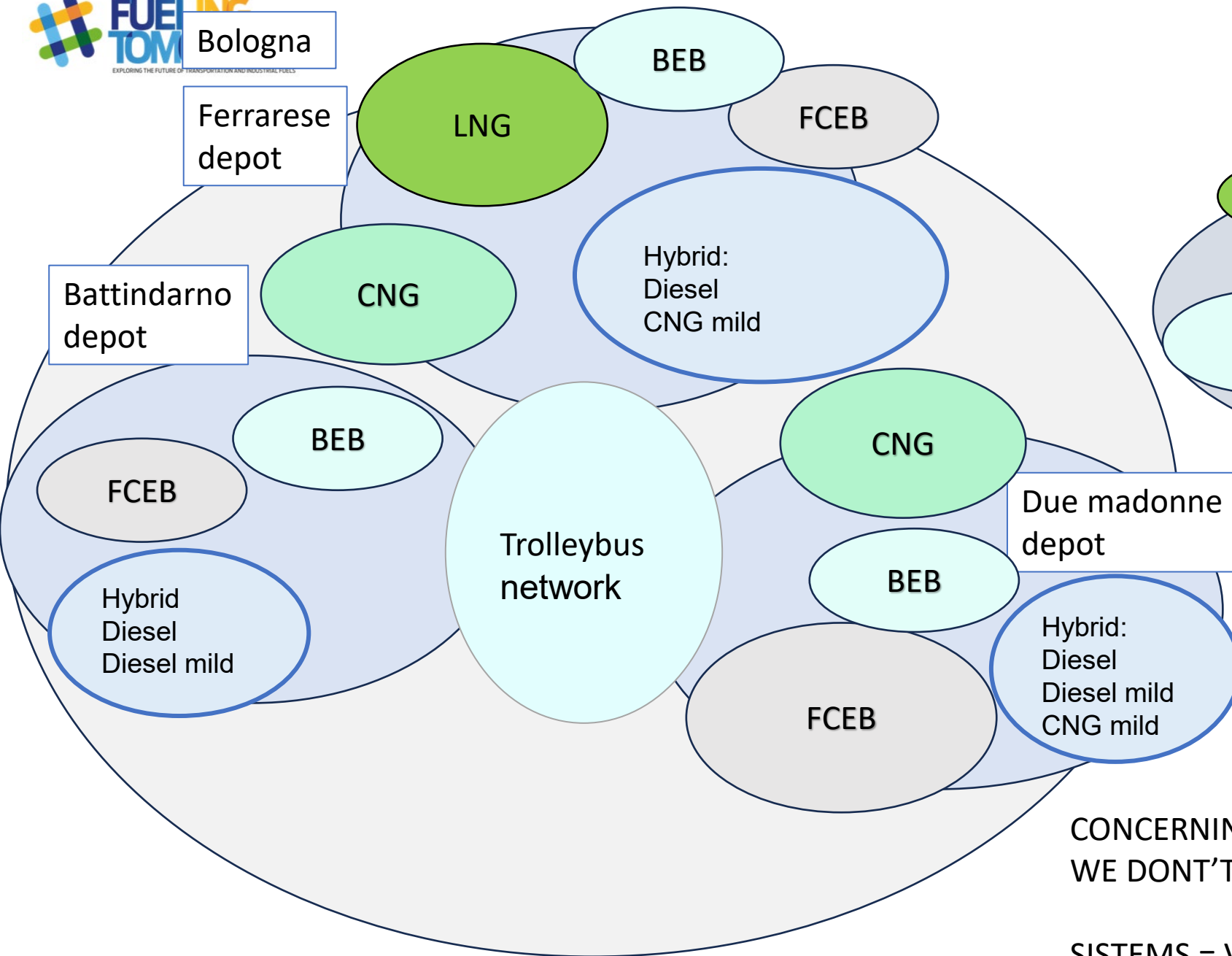






Composizione flotta tper spa

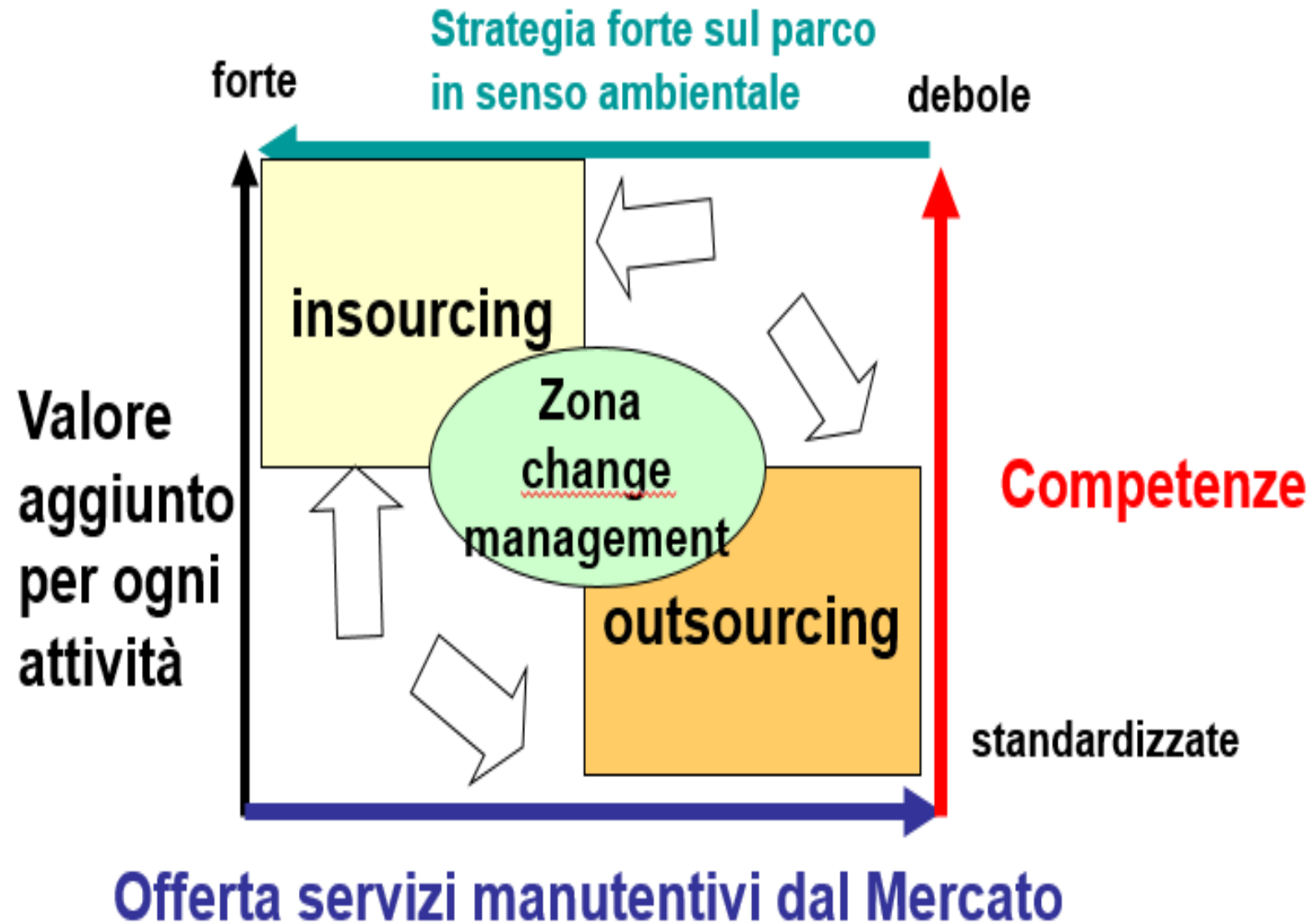
Tipologia Autobus	Dotazione al 13/09/2024	
Elettrici + Filobus	114	9,27%
Metano CNG	390	31,71%
Metano LNG	128	10,41%
Ibrido Diesel	80	6,50%
Diesel EURO 6	185	15,04%
Diesel EURO 4/5	174	14,15%
Diesel EURO 3	159	12,93%
	1230	



Tper spa :SUSTAINABILITY
Infrastructure

CONCERNING ENVIRONMENT
WE DONT'T TALK OF VEHICLES BUT :

SISTEMS = VEHICLES + INFRASTRUCTURES



ORGANIZATION CULTURE

SUSTAINABILITY

TECHNOLOGY

