



eBussed
Interreg Europe



European Union
European Regional
Development Fund

Public Transport and e-bus deployment in Gozo

Good Practice Event - Utrecht

eBussed - Building capacities for European-wide
e-bus deployment

31st March 2022

Current Public Transport in Gozo

➤ **Currently, the public transport system in Gozo consists of a fleet of 23 diesel buses:**

- 21 of them are 9 m buses (Otokar Vectio C)
- 2 of them are 12 m buses (Otokar Kent C)
- All vehicles have Euro VI emission standard



Source: [Malta Public Transport](#)

Current Public Transport in Gozo

➤ These buses are used to operate:

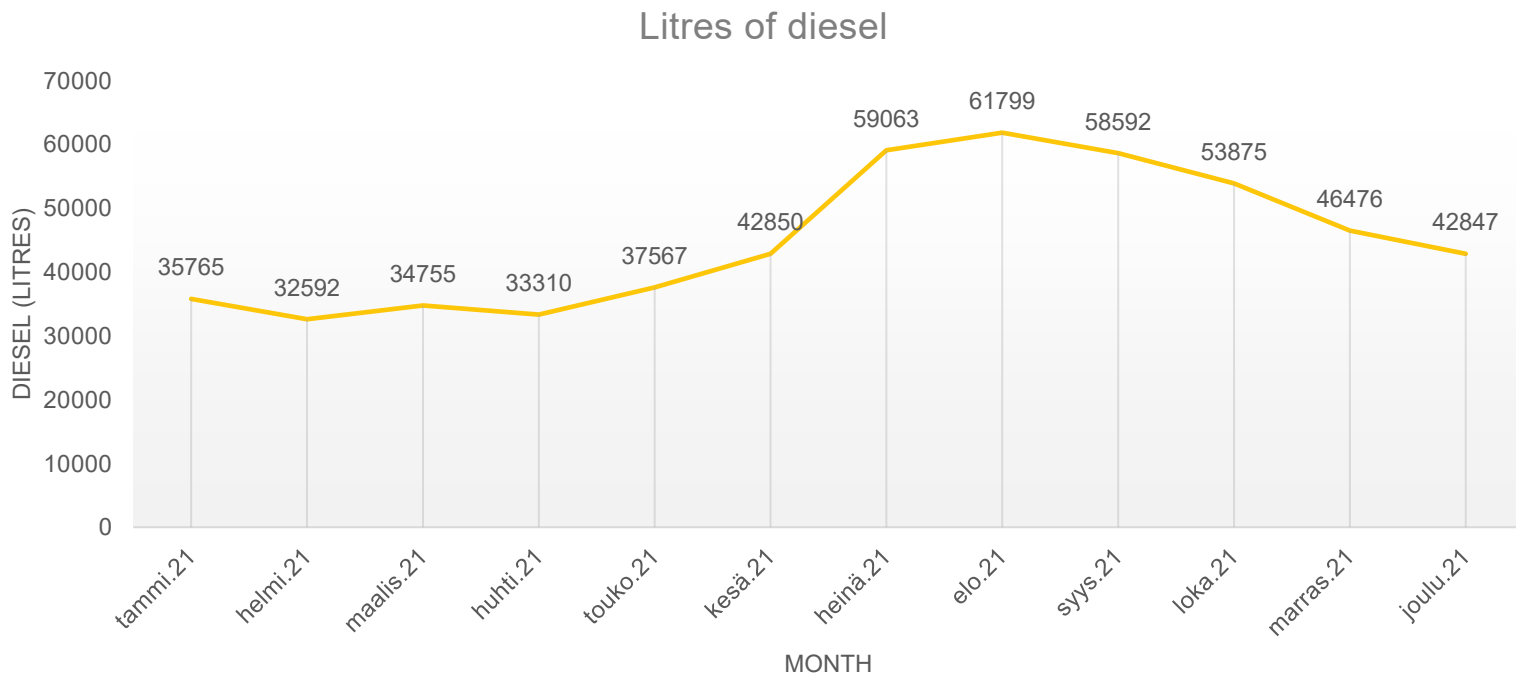
- 15 routes (which connect all villages to the capital Victoria and to Mgarr harbour)
- 2 Direct routes (connecting Mgarr harbour to Xlendi and Marsalforn – the most touristic villages)
- 1 Night route (connecting Victoria to Mgarr harbour)



Current fuel consumption by public transport in Gozo

➤ During 2021:

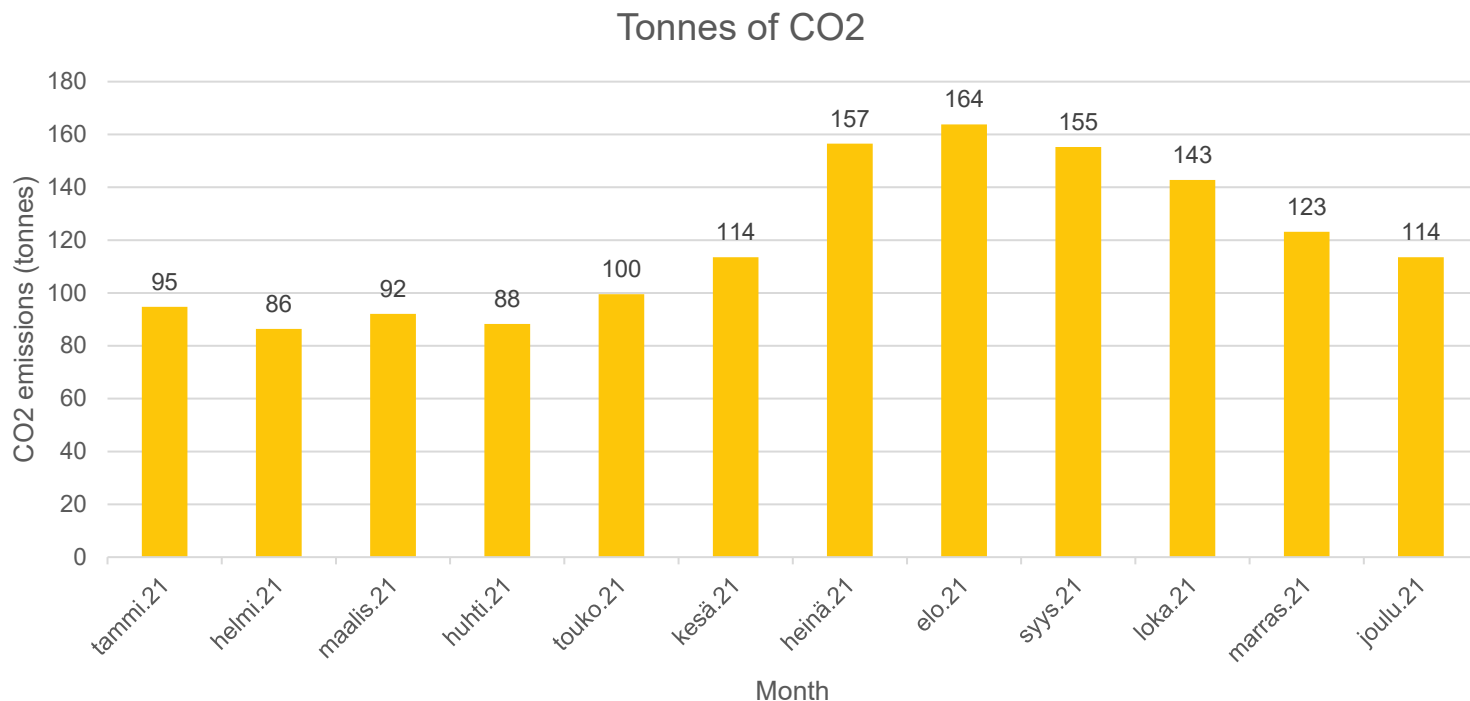
- Total fuel consumption of bus fleet – 540,000 litres of diesel
- Highest consumption was in August
- Lowest consumption was in February



Current CO₂ emissions by public transport in Gozo

➤ During 2021:

- Total CO₂ production by bus fleet: 1,430 tonnes
- Highest CO₂ emission was in August – 164 tonnes
- Lowest CO₂ emission was in February – 86 tonnes



E-buses used for park & ride service

- Currently, 6 e-buses are being used to operate a park & ride service between Xewkija Heliport and Mgarr harbour:



E-buses used for park & ride service

- Funding was secured in 2018 through the SMITHS project led by the Ministry for Transport and Infrastructure projects;
- E-buses were procured through a tendering process and commissioned in 2020;
- Service started in November 2021;
- Project is led by the Ministry for Gozo in coordination with Transport Malta (National public transport authority);
- Operation is done by Malta Public Transport (National public transport operator);
- Service operates daily from 5am – 9pm with a frequency every 10 min during rush hours and every 30min during the rest of the day;
- Service is meant to alleviate traffic congestion near Mgarr harbour;
- Charging is conductive charging via plug-in at a charging depot rated at 60kW.

E-buses used for park & ride service

➤ Specifications:

Model		BJ6123C6BJD
Parameter name		
Maximum person capacity (person) /Number of seats		72/38+2+1
Curb weight (kg)	Complete vehicle	13400
	Front axle	4800
	Rear axle	8600
Manufacturer's maximum mass (kg)	Complete vehicle	18500
	Front axle	7000
	Rear axle	11500
Vehicle length × width × height (mm)		12000×2550×3350
Wheelbase (mm)		5900
Front/rear suspension (mm)		2670/3430
Wheel tread (front/rear) (mm)		2098/1880
Approach angle/departure angle (°)		7/7
Minimum ground clearance (mm)		140
Minimum turning diameter (m)		≤24
Maximum speed (km/h)		69
Braking distance (m)		≤9.5 (the initial braking speed is 30km/h)

E-buses used for park & ride service

➤ More Specifications:

Chassis system assembly

Gearbox	Type	None
Braking system	Rated working pressure of air reservoir	1000kpa
	The time from stepping on the brake pedal to responding by the most unfavorable brake chamber A	≤0.55S
Steering gear	Type	Circulating ball type, hydraulic power steering
Front axle	Type	7.5T
Rear axle	Type	13T
	Final ratio	6.2
Suspension system		Air suspensions, 2 fronts (260±5) and 4 rears (255±5)
Tire specification		275/70R22.5
Driving mode		4*2
Tire pressure, MPa		0.86X Pirelli Tire
Starting air pressure, MPa		0.5-0.55 (after the low-pressure alarm light is off)
Driver seat		Adjustable front and rear, up and down, backrest angles
Options		Slot machine, radio-cassette player, air conditioning and air appliance, electronic clock, side curtain, wheelchair guide plate, etc.
Names and locations of components that are not included in the vehicle's overall dimensions according to	Model sign	Above the front right wheel of the vehicle
	Wiper	In front of the front wall of the vehicle
	Exterior rearview mirror and blind mirror (optional)	Left and right sides of the vehicle
	Side turn light, side marker light and gutter channel	Skins on both sides of the vehicle
	Door emergency valve	Skin on the right side of the vehicle
	Probe cover	Above the rear wall of the vehicle
Exhaust tail pipe		None

E-buses used for park & ride service

➤ More Specifications:

Motor

Motor	Model	BJ6123C6BJD
	Parameter name	
	Motor model	Permanent magnet synchronous motor TZ488XSPE351WH
	Rated power (kW)/speed (r/min)	195/1330
	Maximum torque (N.m)/revolving speed (r/min)	3500/3400

Power battery

Power battery	Model	BJ6123C6BJD
	Parameter name	
	Monomer model	CB240
	Nominal voltage of energy storage device assembly (V)	637.56
	Rated output current of energy storage device assembly (A)	-
	Nominal capacity of power storage battery assembly (Ah)	604
	Total energy storage capacity of energy storage device (kWh)	385.08
	Compound mode of energy storage devices	2P198S
	Mass of energy storage device assembly (kg)	2400

Auxiliary inverter and converter

Name	Parameter name	Specification and parameter
DC/AC inverter of the oil pump	Rated power (kW)	5.5
DC/AC inverter of the air	Rated power (kW)	5.5

Contact information

If you have any questions, please don't hesitate to contact me

Local Coordinator

Joseph Piscopo

joseph.d.piscopo@gov.mt

+356 22156318