

**Stakeholders
Consultation
Cleaner Vehicles
Commission**

EVs offer significant promise to Local Councils seeking to improve the quality of life for their residents, which can be further realized through purposeful integration with other sustainable forms of transportation in mass transit, biking, and walking.

The Cleaner Vehicles Commission invited the Local Councils' Association, as a participating stakeholder, amongst other stakeholders, to identify opportunities, challenges and solutions as it prepares a consolidated consultation document that aims to set a cut off date by when the importation of petrol and diesel vehicles will be banned.

The document will be part of a wider public consultation process. Setting a target date of 100 percent zero-emission car sales would be the first step towards achieving Malta's targets of emitting virtual zero carbon directly from vehicles.

The Local Councils' Association looks at this positive initiative from a local perspective and how this transition may affect the quality of lives of the residents in their localities. It hopes that the work of this commission paves the way for the development of a longer-term and more holistic policy for a low emission future.

Date Presented. 11th September 2020



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Electric Cars

Electric vehicles are one of the most disruptive technologies in present times. The sweeping acceleration of automotive and mobility trends that include electrification, autonomous driving, connectivity, and ride-hailing are propelling the automotive industry to an imminent and rapid transformation.

The adoption of such technology is not optional, and our country has many reasons to pursue strategies for increasing the deployment of EVs. These include environmental benefits, such as decreased transport emissions and improved air quality, and economic benefits, such as the reduced cost of ownership of electric vehicles. For these reasons, EVs offer significant promise to Local Councils seeking to improve the quality of life for their residents, which can be further realized through purposeful integration with other sustainable forms of transportation in mass transit, biking, and walking. Just as future transport must be increasingly electrified, future power systems must make maximum use of variable renewable energy sources.

The key success of EV implementation is likely not one thing, but a combination of things, including infrastructure, technology, modes of transport, human behaviour but above

a well-coordinated master plan with the involvement of all stakeholders. Our towns are struggling with the amount of cars. Despite the attractiveness of these new technologies, private vehicles, in general, remains largely an unsustainable form of mobility especially within our local context. We must question our total reliance on cars and provide the upcoming generations with cleaners and more sustainable modes of transport.

Our Vision - Resident First

In October 2019, LCA presented a shared vision that encapsulates the Local Councils' aspirations, priorities and commitments for long term sustainable economic growth by working towards healthy, attractive and vibrant localities, that our current and future generations will want to live, work and relax in.

The urban environment is important to us, not least because Malta is the 7th most densely populated worldwide. With a direct influence on our lives and an impact on the wider environment, our localities need to be sustainable. Local Councils understands the role that our localities play in the lives of residents and is committed to acting in this area. Together with the central government, Councils have a shared obligation to offer the kind of quality of life and opportunity that make people want to live and work in them and make businesses want to invest.

Urbanized areas are the main drivers of our economic development and whilst delivering essential services such as education, healthcare and mobility, they are also associated with environmental degradation, congestion, crime, pollution, economic and social exclusion.

Making sure that urban-related

policies and regulations are coherent is a major challenge. Governmental institutions may have diverse aims, often carried out independently and with conflicting effects. The Association role is to ensure effective coordination in all directions and at all levels.

The vision is presented under 'Resident First', a four-year project which focuses on Sustainable Mobility, Urban Green Environment, Open Urban Spaces and Smart Cities and how these pillars may improve the lives of our residents in their respective localities. As part of the project, the LCA is working on in-depth urban design research documents, which takes the form of best practice manuals for the planning, coordination, communication and implementation of projects in line with the main Vision.

A comprehensive and descriptive list of all contents of these technical documents is being enclosed. The EV technology and more importantly its integration in our urban infrastructure features directly and indirectly in a number of these documents.

A photograph of a tree-lined street with people cycling and a child roller skating. The scene is bright and sunny, with shadows cast on the pavement. In the foreground, a child in a blue t-shirt is roller skating. Behind them, several people are riding bicycles. The street is lined with tall, leafy trees, and a statue is visible in the background.

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The Private Car

Private Vehicles convey a sense of freedom and movement, especially in an island like ours where the choice of mobility is limited, not to mention style and status. But private vehicles are having a big impact on our islands, our health, our quality of life and on our planet.

According to the NSO Regional Statistics, 2019 edition [note1], the total number of licensed motor vehicles in Malta stood at a staggering 358,947 (387,775 by the end of 2018) or 782 vehicles per 1,000 inhabitants. The figure, placing Malta at the top three in the European Union, is more significant when one considers that there is a vehicle for every inhabitant which is 18 years and over. The number of registered driving licence holders stood at 252,276. These figures need to be read in the context that Malta is one of the most densely populated countries with one of the highest density of roads infrastructure in relation to its land and the least street space per inhabitant in the EU. Furthermore, our tourism dependent economy, 2 Million visitors a year, is relying on the heavily congested infrastructure and public transportation which are not yet given

priority over cars, to move around the islands efficiently.

Malta had the second-highest increase in carbon dioxide emissions from 2017 to 2018 in the EU, with vehicle emissions being the biggest source of pollution in Malta.

The World Health Organization (WHO) has identified climate change as one of the greatest health threats of the 21st century, and air pollution as the single largest environmental health risk. At the same time, non-communicable diseases constitute the largest and fastest-growing global health burden, with treatment costs placing a massive strain on government and individual resources.

Cars produce a lot of energy before they ever make it to the open road. Materials like steel, rubber, plastics, paints and other materials must be created before a new car can be

manufactured. Similarly, recycling and disposal costs to the environment are largely beyond the control of most customers.

The automobile's environmental impact, due to energy consumption and emissions of air pollution and greenhouse gases, is largely contributing to climate change. Fortunately, to a certain extent, the level of this impact is under the control of the driver.

Petroleum products are extremely harmful even before they are burned. The extraction is an energy-intensive process that damages local ecosystems. The burning of these fuels result is smog, carbon monoxide and other toxins emitted by vehicles leaving tailpipes at street level, where humans breathe the polluted air into their lungs.

Finally, it is the building of roads to support our large number of vehicles and car dependence, as well as the urban sprawl that tends to follow in their wake. It is the excessive building activity that is required to store cars and the lack of open urban space to make space for parked vehicles. Such impacts are difficult to quantify even though not impossible.



First things First - Walkable Localities

Walking is the most basic and fundamental mode of human transport. It is free, good for our health and the most sustainable transport choice for all people. Walking through a few blocks or crossing a street in our localities has become inconvenient and unsafe. It is not that we do not have the desire to walk, but it is our built environment that discourages us to do it.

Today, the overbearing and ever-increasing presence of vehicles has replaced the much-needed space for pavements, trees and leisure spaces, leaving an urban environment that is disconnected, visually unpleasant and unsafe for those outside the car. The Local Councils Association is promoting walking and cycling to provide an alternative and sustainable method for travel beyond driving especially for short-distance mobility.

Councils feel the need for a fundamental change in the way streets and public spaces are designed and constructed in order to promote walking and reclaim space for people, especially the elderly, children and people with reduced mobility. The Local Council intends to publish its first document in the next coming months as to guide local councils in planning,

designing and promoting safe walking environments, and identify the tools for improving the walking environment.

As our first steps in this direction, the Local Council Association together with the Ministry for the National Heritage, the Arts and Local Government and in coordination with Transport Malta and the Ministry for Transport, Infrastructure and Capital Project are working together with a number of Local Councils on an action plan to make sure this mobility is safe, sustainable, healthy and efficient. The project is referred to as Slow Streets.

The aim is to promote walking, cycling and public transport, in parallel with other educational campaigns to avoid unnecessary travel. To achieve this, a series of

temporary interventions are being implemented to ensure that our localities are as safe as possible, now and in the coming weeks, in order to minimise new cases of Covid-19 and to protect people's health through non-polluting means of transport.

A number of safe walking corridors within every locality will connect shops, churches and piazzas, schools, primary health centres, gardens and play areas. While every neighbourhood has different concerns and considerations, Slow Streets is a concept that can potentially extend to a permanent network of safe walkways and low-stress biking so as to slow traffic and create safer streets.

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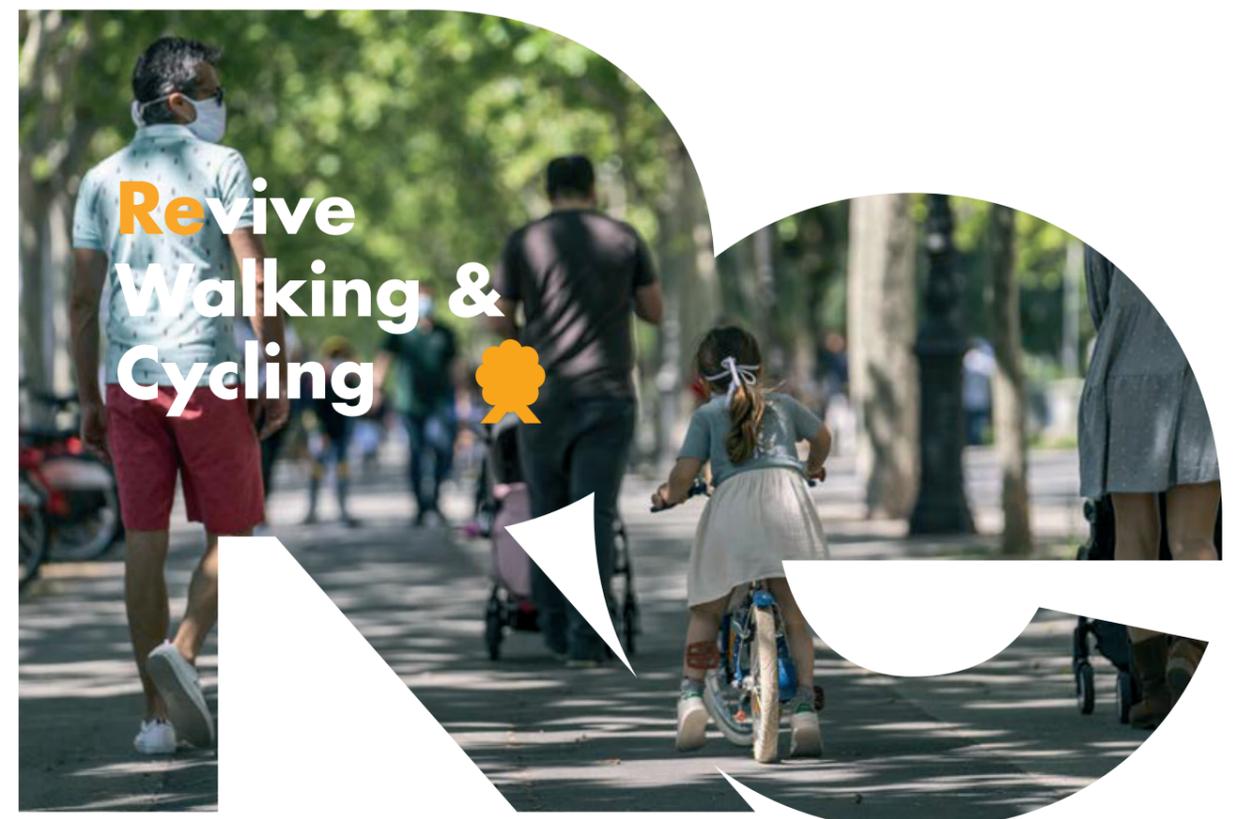
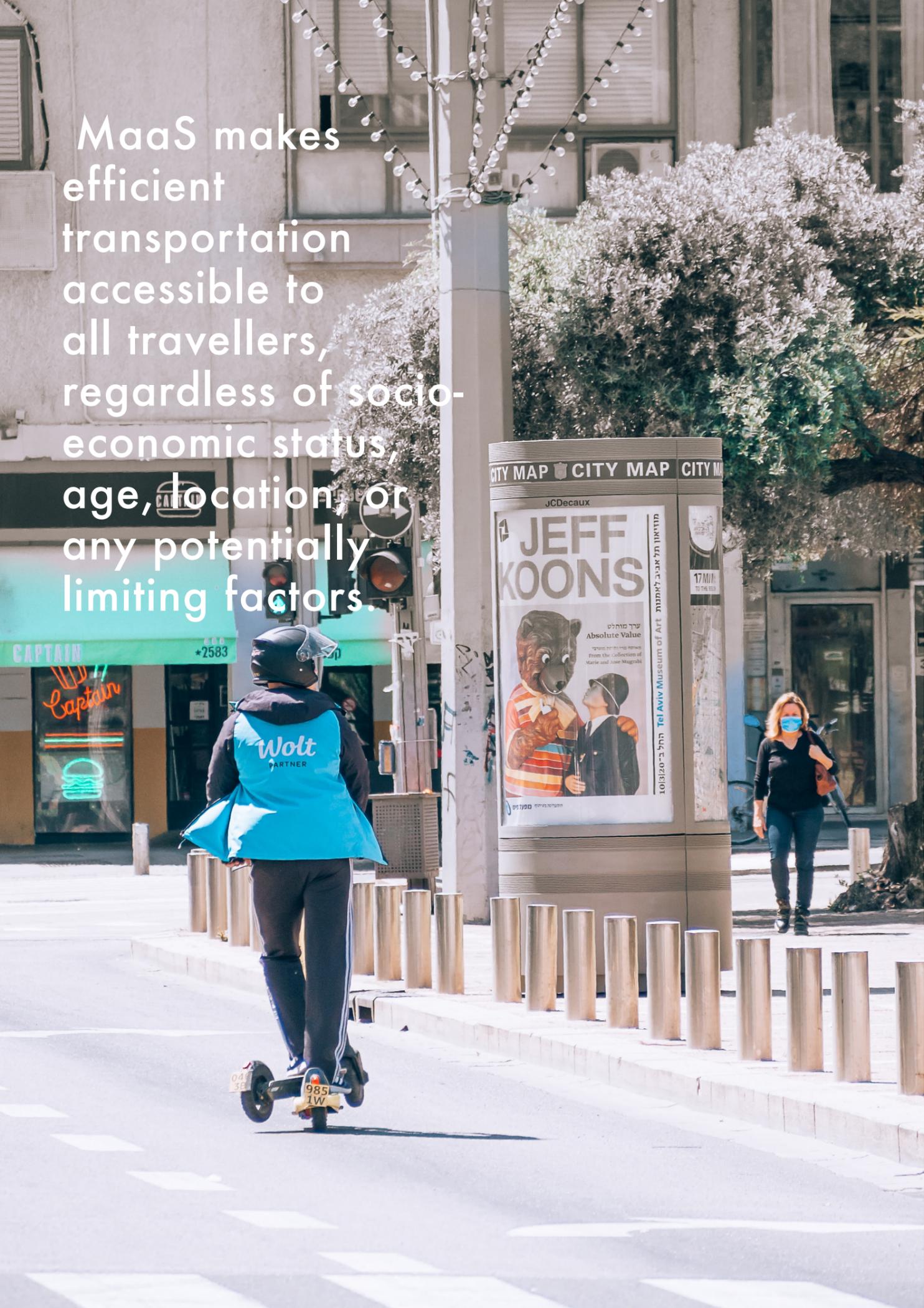


Image from the website www.barcelona.cat.



MaaS makes efficient transportation accessible to all travellers, regardless of socio-economic status, age, location, or any potentially limiting factors.

MaaS

The EV revolution needs to be seen in a world that is moving towards a more efficient, smarter future. Mobility as a Service is part of the Solution, especially within the first and last mile of our travel.

Whilst, in most cases, the central government is investing in road infrastructure to better link localities rather than penetrate them, our communities and local governments are attempting to better manage human transport, and new, personalised services are emerging; shared cars, city bikes, city scooters, to mention a few. The recent Slow Streets initiative is the first step in this direction.

The sharing economy and the expansion of micro-mobility have provided a new opportunity for mobility planners to solve the last mile challenge. It offers additional and seamless choices to move around the city without a private vehicle whilst complementing public transport. MaaS (Mobility as a Service) differs from existing transport solutions because it allows consumers to select the option that best fits their needs instead of the current single option. The solutions are centred around optimising movement in urban environments and take various contextual factors such as traffic peaks and parking into account.

MaaS optimises travellers door to

door (otherwise known as the first and last mile) transport, including planning, booking, and payment services for multiple modes of public and private transportation - simplifying and improving the experience.

By providing individuals with more efficient transportation options, MaaS aims to combat the adverse effects of private vehicle usage and encourages travellers to use more sustainable alternative transportation services, such as public transit and shared vehicles, both motorised and not. When housing various transportation business verticals into one unified marketplace, MaaS levels the playing field for smaller transportation businesses, shifting the decision from which provider to travel with to how best to get from point A to point B.

MaaS makes efficient transportation accessible to all travellers, regardless of socio-economic status, age, location, or any potentially limiting factors. It promotes behavioural incentives over infrastructural investments, enabling urban planners to leverage mobility data to identify high impact infrastructure investment opportunities.

Parking

For some years now, the impossible promise of being able to provide on-street parking spaces no matter the number, the location and the time is a major cause of discontent amongst our residents.

Private cars are severely underused, even among those who rely on them as their primary form of mobility. Numerous reports illustrate how private cars sit parked 95% of the time. In fact, most single cars occupy at least two parking spots; one at home, another at work. Because of this, our localities have roads clogged with traffic, while premium urban, public space sits empty or occupied by parked cars.

There seems to be no scientific data on the number of on-street and off-street parking in our localities. Using a number of indicators, LCA roughly estimates that there are currently 500,000 car park spaces between on-street and off-street parking occupying somewhere between 12 million square meters to 15 million square meters. A study by the UOM reveals that in both Pieta and Birkirkara, 70% of the public urban space is dedicated to car infrastructure. Moreover, the pressing demand for car park spaces indicates that the current overall provision of parking is not even sufficient.

Unsurprisingly, if given an option, developers choose to pay CPPS fees

instead of providing on-site parking in busy cities and town centres. The minimum building standards for off-street parking, especially within our urban core, often results in a deadening, dull, and hostile environment to pedestrians. Above all, these parking spaces underneath buildings are provided at the expense of the property buyer to subsidise the car owner.

The answer to most parking problems is good-on-street parking management. It enables streets to function more efficiently and to be better placed. It makes them safer. Parking management helps local commerce, residents, bicycle users, people on foot, and vehicles of all kinds. It enables the efficient and fair use of street space. It encourages off-street parking investments when required and encourages more sustainable urban mobility.

Parking management is made of a variety of strategies that encourage more efficient use of parking facilities, improve the quality of service provided to parking facility users and improve parking facility design.

Successful management influences the manner, location, timing and duration of parking along streets to ensure that such parking is used efficiently and is consistent with wider goals for the streets, for the area and for the transport system. Objectives include rationing available spaces, establishing orderly and efficient streets, and preventing negative impacts on traffic, public transport and people on foot or bicycles. More broadly, it should aim to include travel demand management, economic vibrancy or favouring certain user groups with a view of all parking available including off-street third-party spaces. The tools should include setting time limits, charging fees, enforcing compliance and monitoring success.



A dark grey BMW M car is shown from a front-quarter perspective, parked on a cobblestone street. A blue charging cable is plugged into the charging port on the front fender. The car features a multi-spoke alloy wheel with a BMW logo in the center and a blue brake caliper with an 'M' logo. In the background, there is a concrete barrier with red vertical stripes and a blue charging station. The text is overlaid on the left side of the image.

The setting of national and local charging infrastructure networks is where the Association believes can directly contribute to the successful implementation of this project.

Road to Zero

The speed of transition to an emission-free fleet of vehicles is closely linked to the introduction of favourable incentives and benefits.

When it comes to electro-mobility, few countries have come as far as Norway. When looking at the wide range of zero-emission incentives, it is easy to understand why Norwegians were ready to shift to BEV before any other European counterparts.

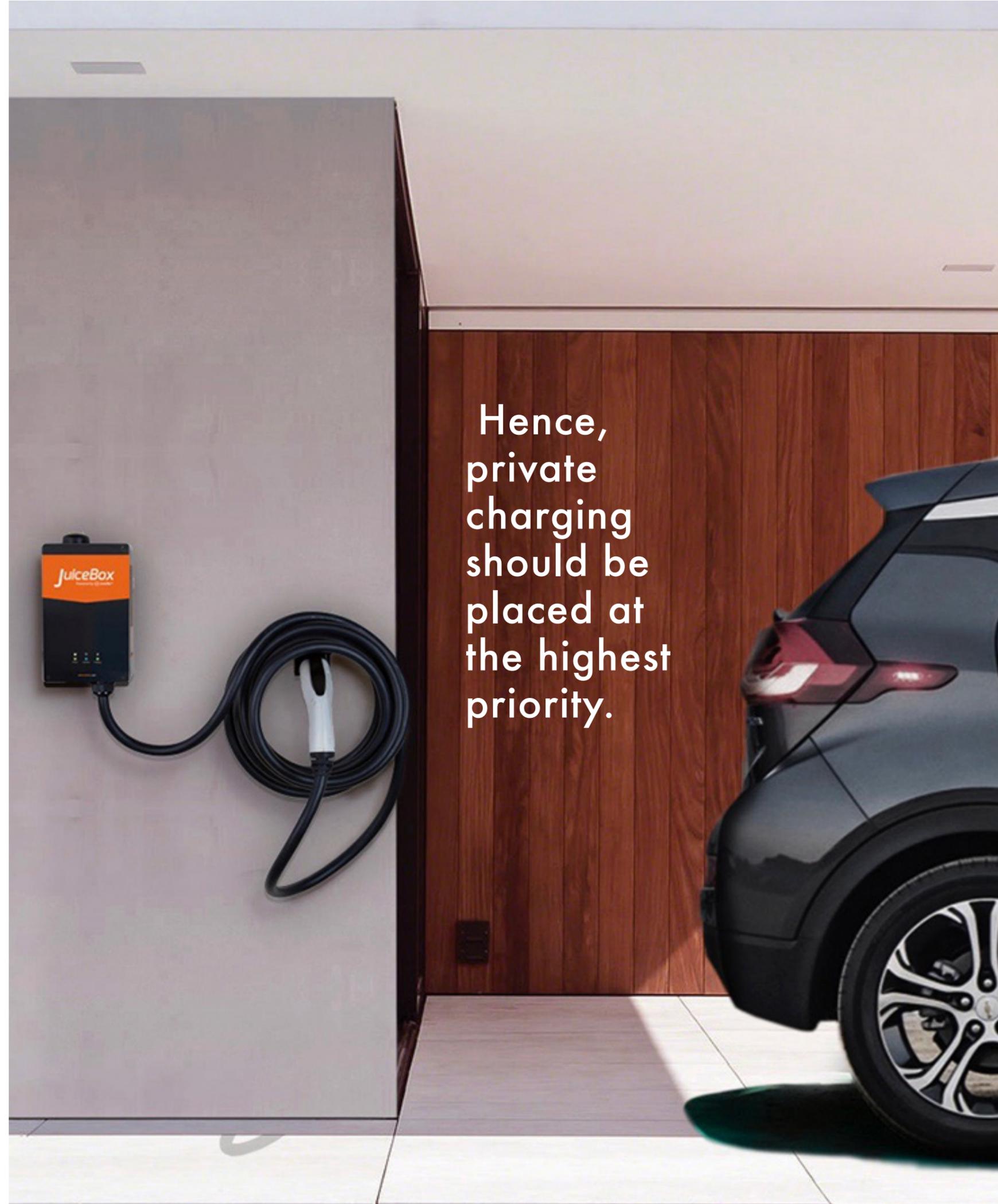
Incentives such as no import taxes, exemption from VAT on the purchase, subsidised parking, company car tax reduction which includes leasing and many other incentives should ensure that it always pays to choose zero emissions when buying a car.

Naturally, it should always be economically beneficial to choose zero and low emission cars over high emission cars through the 'polluter pays principle'. The government needs to make sure that the drivers of cars will be paying for these initiatives by shifting car tax revenue onto higher polluting vehicles. Furthermore, the Local Councils' Association would like to see greater fiscal incentives for those individuals who choose not to own private cars and use public transport and sustainable shared mobility as their only source of mobility in order to ensure that our

number of registered cars will start decreasing.

In addition to the initiatives mentioned above, the Government needs to also support the development of a basic charging infrastructure network. The setting of national and local charging infrastructure networks is where the Association believes can directly contribute to the successful implementation of this project.

Hence,
private
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Our Proposals

Private Charging

With one of the highest population density in Europe and the least street space per inhabitant, it is not difficult to understand why on-street EV parking will create havoc on our streets. Hence, private charging should be placed at the highest priority. According to NSO recent data, 70,000 people have access to a private car park. This amounts to circa 48% of households in Malta. Furthermore, there are a large number of private and public companies who provide parking for their employees. Aggressive incentives for the private and commercial sector will be beneficial for a number of reasons, some being;

The infrastructure is considered as the cheapest from an initial capital perspective.

Currently, there are no incentives to encourage residents to use their private garage spaces with most opting to use on-street parking whilst using their private car park spaces for storage or an extension of the home. With the right incentives, residents will leave park their private vehicles in their garages freeing up more public on-street parking for those who need it.

Off-Street Parking

The Association of Local Councils will be pushing for increased investments in private community parking buildings and PPP schemes for increased private parking facilities where needed and within a holistic urban plan to free up strategic areas for a greater number of public open and play areas, better walkability and the increase of cycling tracks within our localities.

Within this context, well-studied incentives should be in place to encourage the use of private parking and charging, especially at night.

Rapid Charging Hubs (50-150kw)

Fast charging is often seen as a means to facilitate long-distance driving, however, densely populated urban cities contemplate if such technology can be an alternative to a larger amount of slow chargers which have significant impact on limited public space. Additionally, modalities such as taxis, car sharing and last mile deliveries, who tend to switch to EV faster, prefer fast charging due to the different usage patterns.

As the cost of high speed

charging stations have decreased significantly, and business models exploiting adjacent business segments of EV charging, (billing, payments, F&B, etc), the attractiveness for fast charging will continue to increase.

Recently studies show that despite the longer charging times, compared to gasoline refueling, existing fuel stations would be best placed for this mode of charging. The existing number of gas stations would be sufficient due to the additional home and workplace charging alternatives. There are 89 fuel stations conveniently located across both islands and these can fulfil the high speed charging requirements.

Slow to Fast Charging in our inner urban cores and residential areas

Slow to Fast chargers installed on our pavements within the urban cores of localities are the least preferred option for our Local Councils.

Streetscape spaces are at a premium, with competition from a large number of sources of street furniture. Bulky chargers and cabinets, when located on footways, can have a detrimental impact on pedestrians.

Whilst acknowledging the need for public chargers for residents not having access to a private car park space, the Association feels that this should be a demand-led approach. The management of a demand-led system (not a desire-led system) needs to be transparent, consistent and systematic. Priority needs to be given to areas which are designated as residential with little or no commercial activity. The choice of charging models, when locating charge points in the carriage way where it is possible and safe to do, should be low street-impact with designs encompassing lamppost chargers with hidden sockets with solutions to hide cables.

Better than occupying the already limited footways, the concept of community chargers is a preferred option. Community chargers are a grouped hub of slow to fast AC chargers in off-street, residential areas designed for open access, ideally based on a booking model.

Another solution is Destination Chargers. In partnership with the commercial sector, destination chargers will be in places where people stay for a few hours such as gyms, supermarkets and shopping centres. This will enable EV owners to incorporate charging into their usual routine.



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