From Vilnius to Klaipėda: the EV transformation of Lithuania

Lithuania is steering its course towards a sustainable future. Over a decade ago, on 19 October 2010, the first all-electric car, a Honda HR-V, quietly graced the streets of Vilnius, signalling a shift towards electric vehicles (EVs) that has since accelerated and transformed the nation's transport landscape

ast forward to July 2023. and it is hard not to notice that the hum of electric vehicles is increasingly common on Lithuania's streets. The country has registered a total of 15,531 M1 and N1 class electric vehicles, consisting of 9,487 pure electric vehicles and 6,044 plug-in hybrids. 60,097 hybrids (HEV) M1 and N1 vehicles are registered. 65% of the EV operators are private, 35% are legal entities, and around 50% of all registered EVs are new. The share of new EVs has almost doubled this year. This progress represents a quadrupling of EV numbers since 2020. Agnė Vaiciukevičiūtė, Lithuania's Vice Minister of Transport and Communications, provides some insight in an interview with the Baltic Business Quarterly (page 66): "With 86% or 288 more EVs purchased this year than in the same period a year ago, we expect the number of EVs in both annual purchases and the share of EVs in the total fleet to increase more rapidly once all the nationallyplanned measures to promote electro-mobility are in place."

Vilnius is streets ahead

In the capital city of Vilnius, the growth in e-mobility has outpaced that in other Lithuanian towns. As Gabrielius Grubinskas of the Vilnius municipality told the Baltic Business Quarterly, "According to Regitra data as of 1 July, 6,700 of the total EVs registered in Lithuania were registered in Vilnius." There are currently more than 1,000 public EV charging points in Lithuania. In comparison, 168 EV charging points were installed in Lithuania in 2014-2020. Grubinskas states that, "The vast majority of charging points are an investment in the future. The first places to be filled with charging stations are those with the highest employment potential." According to Žygimantas Zabieta of Lectrium in Vilnius, businesses themselves are starting to take better care of the infrastructure for their customers, with a sufficient number of slow charging stations appearing in larger car parks near shopping centres. At the same time, Zabieta points out that a fast-charging station in the Akropolis shopping centre is absurd and a mistake. He explains, "It takes 40 minutes to charge a

car there, and it is unlikely that an EV driver will leave the cinema or restaurant to reposition the car. The charging point remains busy, other EVs cannot charge, and at least ten slow charging connections could have been installed for the same cost."

Kaunas falls short

By contrast, Lithuania's secondlargest city Kaunas faces its own unique challenges. Despite approving a plan for public access charging of electric vehicles, the city has imposed a 30-minute limit on slow charging, an impractical restriction that falls short of users' needs. Martynas Matusevičius of the Kaunas municipality explains, "On 28 March 2023, the City of Kaunas approved a plan for public access charging of electric vehicles to be installed." However, as Zabieta says of Kaunas, "a 30-minute charge provides enough electricity for only 20-30km", suggesting that the restriction fails to meet the practical needs of EV users. These limitations demonstrate that although municipalities are making efforts to promote e-mobility, their strategies often fall short of meeting the immediate and future



needs of EV users. According to Matusevičius, a tender for the purchase of charging services for the existing 21 EV charging stations is planned for Q3 2023 in Kaunas.

Private sector's proactive approach

Moving west from Vilnius and Kaunas, we arrive at Klaipėda, a vibrant port city known for its maritime heritage. Even though Klaipėda stands positively in the context of Lithuania's Baltic Sea cost, the current state of e-mobility there presents a contrasting picture to that of Vilnius. Dainius Jakas, an EV enthusiast and 100procentuelektrinis. lt portal founder, said in an interview with the magazine, "I would say Klaipėda had a pretty good situation for a long time until there were very few electric cars on the roads". The city's efforts towards promoting e-mobility have been more conservative than in the capital and have not yet fully aligned with the demands and expectations of EV users. On the other hand, he also emphasises that Vilnius could have achieved much more in developing the EV infrastructure.

Still, in principle, the previous mayor, who was in charge of the capital for two terms, was against private transport. According to Jakas, "They would all very much like us to use public transport in the city." Despite these challenges, the private sector has risen to the occasion and demonstrated a more proactive approach towards fostering e-mobility in Lithuania. Companies like Ignitis are leading the way in developing the necessary infrastructure to support the growing fleet of EVs. Eimantas Balta of Ignitis emphasises the role of collaboration in driving this transformation, saying, "Close cooperation between municipalities, energy companies, and real estate developers is vital." This sentiment underscores the importance of synergy among all stakeholders in driving the e-mobility revolution. While acknowledging the current challenges, Jakas also recognises the potential for future growth. He notes, "We have half a per cent of electric vehicles of the total car fleet. The infrastructure is not very suitable at the moment, and we're in the initial stages of development."

Ambitious plans for 2030

Agnė Vaiciukevičiūtė reminds us that her ministry has set ambitious plans for the future of e-mobility in Lithuania. By 2030, it envisions that half of all new cars sold will be electric. This target aligns with the broader goal of the European Union to reduce greenhouse gas emissions and transition towards cleaner modes of transport. The total number of electric vehicles is expected to increase to 50,000 by 2025 and to reach 240,000 by 2030. At least 1,200 EV charging points are planned in Lithuania by 2025, and a network of 6,000 public and semi-public EV charging points is expected by 2030. As Lithuania forges ahead on the road towards e-mobility, it's clear that achieving a sustainable future requires more than just electrifying the roads. Municipalities, such as those in Vilnius, Kaunas, and Klaipėda, must adopt a more usercentric approach, aligning their strategies with the immediate needs of EV users. The active involvement of private enterprises and efficient utilisation of EU and bank finances is crucial to enhance the EV infrastructure.