## Micromobility from an operator's perspective





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## **About Nomago**

- Largest travel and mobility company in Slovenia
- Subsidiaries in Croatia & Italy
- Broad local, national, and international range of services
- Registered lines connecting 7 European countries
- Planned expansion to new countries and cities
- Focusing on a great User Experience and services
- Development of Sustainable Transportation and Solutions



nomago.s





Comprehensive range of services

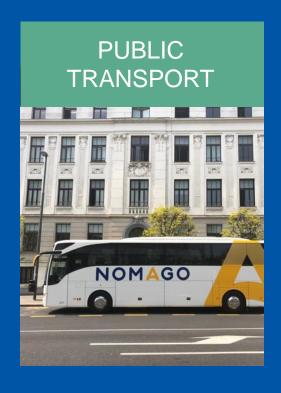


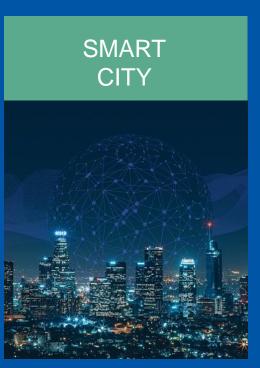
35 million km/year 700+ buses and coaches

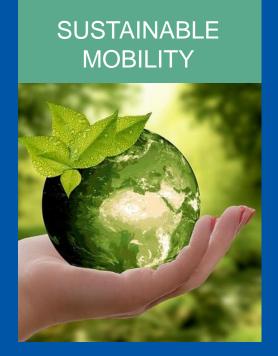


## Areas of developing the future of mobility

a greener approach to transportation













# New mobility culture

- All-in-one D2D mobility service
- Greener and better mobility partnership
- Sharing instead of owning
- More (safe and active) space for pedestrians and micromobility users
- Development of microtransit and PT



TAXI / CAR E-**SPORT INFO PARKING ATRACTIONS SHARE CULTURE** rideshare chargers **INTEGRATION** SMART CITY / DESTINATION PLATFORM **SMART DESTINATION WEB PORTAL PAYMENT SMART PLATFORM MOBILITY ENGINE**  $A \rightarrow B$ **SMART DESTINATION MOBILE APP SMART CARD** DATA





Fast & Easy

Multi-Platform access



**Card Payment** via Mobile app, web page and Info point



User **friendly** rental process



Flexible return at the station

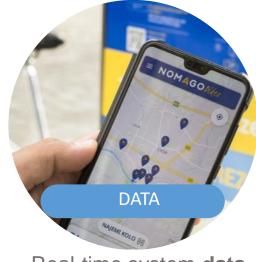
### The components of bike sharing today



International References & Easy Integration



**24/7** Maintenence, Customer support and Administration



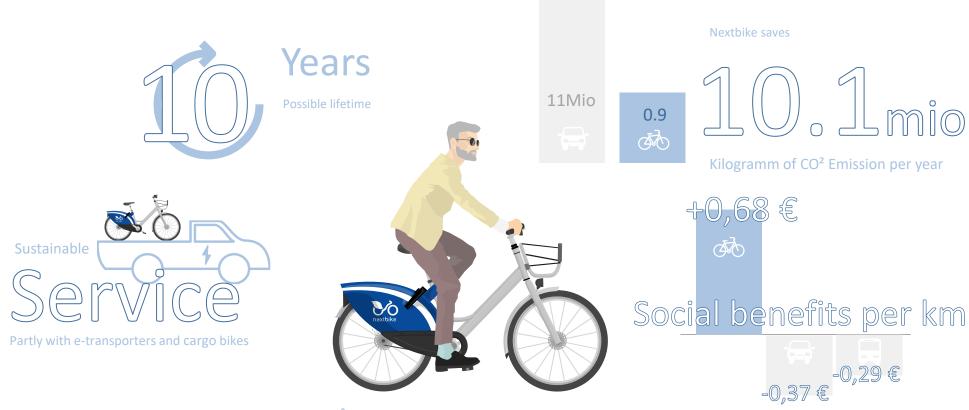
Real-time system data



## Nomago Bikes powered by nextbike



1 registration – 1 UX in 275 cities, 25 countries







Burnt calories in 1 year (100 Kcal per Trip)



Km driven on nextbikes per year

















## Regional bike sharing



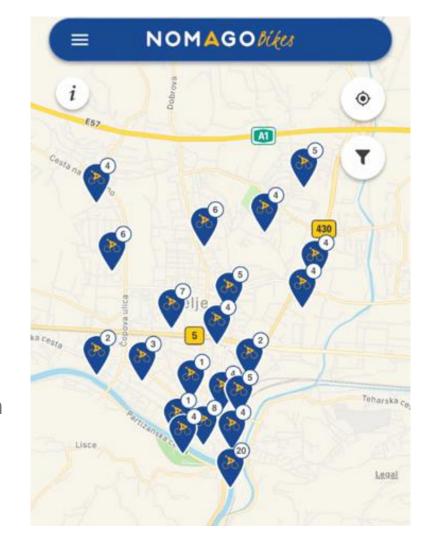
### KolesCE bike sharing

- 8 municipalities in Savinjska region
- 1 registration same pricelist, same UX
- 49 stations, 259 bikes: 50% electric 50% classic
- 75 thousand km driven per year
- Daily trips between cities in the morning & afternoon



### **Average rental**

- 15 min
- 1,5 km

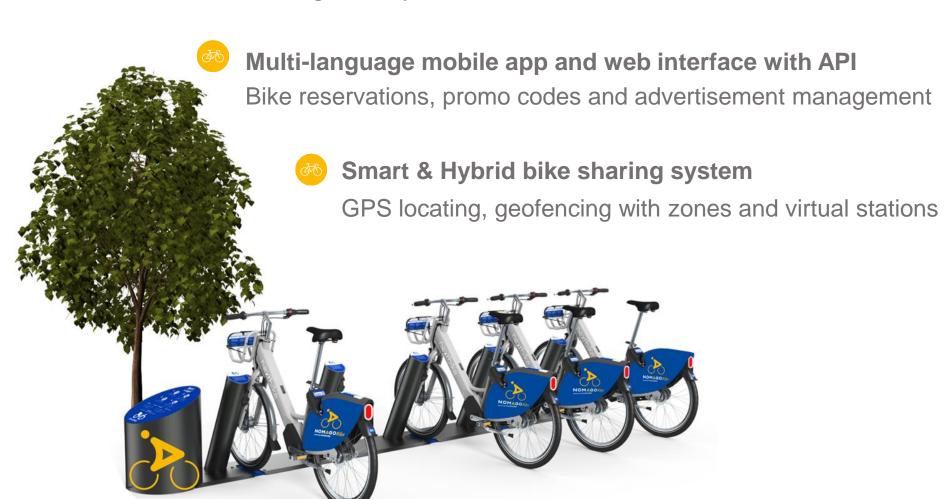




## Flexible & Innovative

Complete and integrated Micromobility offer in Slovenia

Electric and Regular bicycles build to share





## **Smart bike**



Height-adjustable ergonomic saddle for persons of 1,50-2,0 m; with theft protection

#### FrameLock

- Enables parking feature in the app
- Anti theft alarm
- Precise localisation via Wi-Fi, GPS, GLONASS or BEIDOU
- Average 40 day battery life
- Recharable via solar basket

RFID reader for smart card integration

Front and rear light with built-in reflector and parking light

Shimano Nexus Hub



Basket with solar module for charging the FrameLock

Covered wiring reduces vandalism

Air tires with puncture protection and reflectors

ISO 4210 CERTIFICATION



## **E-Smart bike**





#### Lithium ion battery

- Designed for durability
- Encapsulated into the downtube
- Capacity of 14 Ah, 500 Wh, 36 V
- Charge level display integrated in the frame

#### Engine

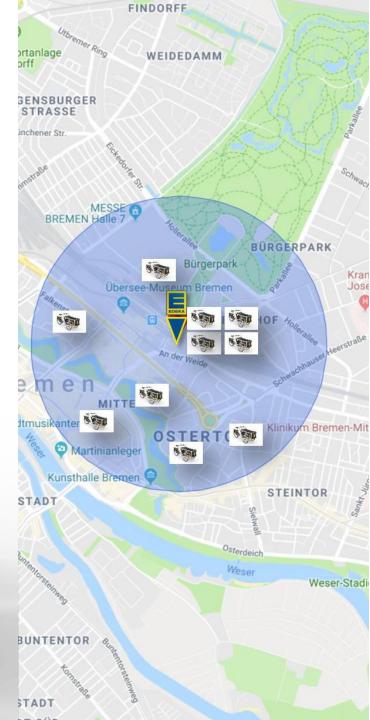
- Natural driving experience due to mid-mounted engine
- Made in Germany
- Supports up to 25 km/h
- Stepless boost feature for fast acceleration





## Cargo & E-Cargo bike





### **Station with terminal**

For electric & classic bikes

## Multimedia Kiosk with charging infrastructure

- 7 inch touch screen with interactive map
- Customer channel for registration, rental and return
- Smart Card reader
- Large surface for additional information or advertisement







## **Docks & Sign station**



### Flexible, prominent, easy to install

- No cabling, grid connection or wireless signal
- Cost-efficient
- Operations security
- Best user experience
- Different variations







## **Micromobility Corral**

»gather together and confine«

Smart parking based on GPS data and geofencing

Guided dockless Micromobility – virtual stations





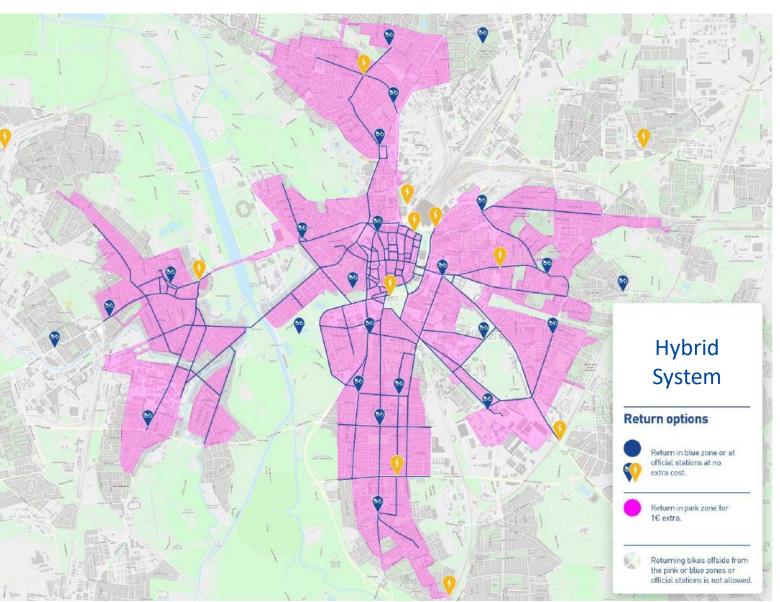




## **Hybrid system**



- Dockless system with designated stations with docks & Charging stations
- Virtual stations with infrastructure Corral type
- Integration into seamless network –
   guiding the users with differnet pricing
- Micromobility stations at Mobility Hubs
- Involvement of the community
- Collaboration with the City and private land owners





## Mobile app

Key benefits of the NextBike mobile app

Overview of real time availability
of bicycles and docks at the
stations

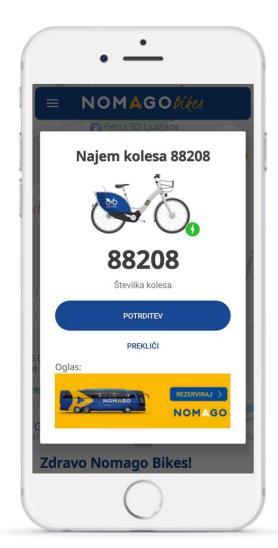


**Rental history** along with distance travelled and CO2 savings



**Comments** on the rental and provide **feedback** 







**Registration,** user account settings and rental history



Easy bike rental process via bike number or QR code in less than 3 seconds



It works in **Slovenian**, **English**, **Croatian**, **Italian** and more than 10 foreign languages

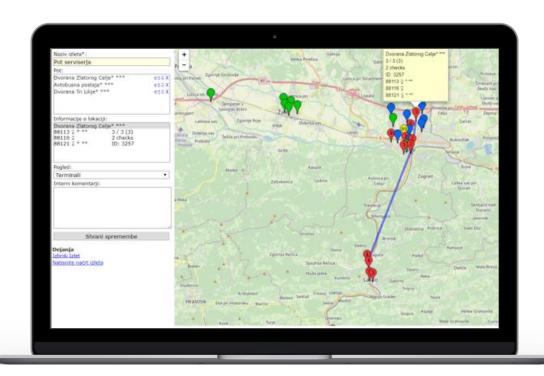




- Cloud based system, multi-user access
- Comprehensive overview of the database (users, rentals, bicycles, stations) on visual **Dashboard**
- In-depth analysis (access to detailed analytics with more than 50 data categories, daily / monthly report interval, number of registrations, leases, returns, new and regular customers, average rental duration, movement reports, servicing, bicycle inspections, rental amounts, payments with credit cards and cash)
- Provides support for customer relationship management (CRM) and content management (CMS)
- System control via backend 24/7; monitoring the movement of wheels and the operation of stations and the condition of batteries on wheels, etc.
- **24/7 call center** available via phone, e-mail and app support, with access to the functions of the back-end system for quick help to users
- Compliance with all necessary legislation!

## System Administration

Backend office





## **System** integration



Worldwide references



System integration via already developed input and output API connection – RFID/NFC cards

- Public Transport
- Smart city services
- Hotel and destination cards
- Workplace contactless cards

Support for employers in promoting a healthy mode of transport to work and after work

### Numerous references from more than 200 cities from 30 countries around the world (EU, USA, NZ, India):

- Cologne integration with KVB (public transport)
- Stuttgart integration with a smart public transport card
- Budapest integration with BKK (public transport)
- · More than 20 cities in Croatia and Bosnia and Herzegovina



### Mobility hub – space for integrated public and shared mobility

- different and connected transport modes
- facilities and information features to attract and benefit the traveller
- areas providing services to connect people through sustainable travel

### **Components:**

- Public transportation: bus, rail, on-demand ride sharing
- Shared Mobility: bike share, cargo bike share, car share, scooter share
- Mobility related: digital pillar, journey planning service, registration and ticketing, customer services, electric car charging, bike parking and charging, last-mile delivery
- Non-Mobility: Package delivery, cafe shops, waiting area, Wi-Fi, phone charging







Jelbi station at Berliner Verkehrsbetriebe (BVG)

## Micromobility hub

- Combining different modes in one place
- Supported with MAAS platform
- User and operations benefits
- Can be a part of Mobility Hub, PT stations or P+R facilities





### What will the future of bike sharing look like?



- Electric or regular bikes?
- What in more important for good bike sharing – hardware or software?
- What will be the future of Micromobility docked, dockless or hybrid systems?
- What is the most popular way of renting the bike – via Kiosk terminal, Mobile app or Smart Card?
- Cargobikes, kids bikes, tandems in bike sharing?





# The future of Micromobility







## Come along!



