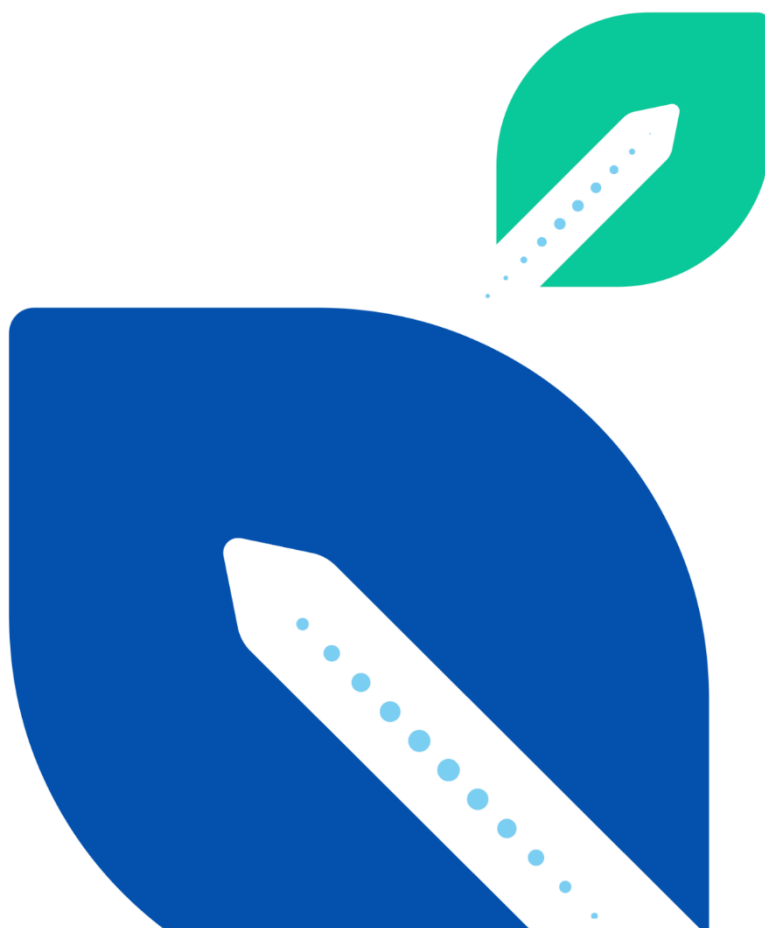




## City-specific narrative scenarios

Padua



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# City-specific narrative scenarios

## 1.1 Padua

### 1.1.1 Scenario 1- The modular and sustainable city

In 2030, Padua ranks high as sustainable city in Europe, thanks to strong local political support. The allocation and management of urban space for sustainable modes of transport is high on the policy makers' priority list. Innovative business models are steadily developed, causing a modal shift towards public transport, bike-sharing, trams and micro-mobility. Especially electric scooters are booming. Notably, in summer, the demand rises in the city centre due to tourists and citizens, but safety still represents a concern. Integration between passenger and freight urban mobility becomes a reality. Urban logistics is going through a profound network reconfiguration to effectively cope with the skyrocketing demand caused by on-line shopping, but traditional shops in the city centre are forced to change their roles. However, monopolistic trends in last-mile logistics market imply that home deliveries are no longer provided at low cost and lead times are more relaxed.

The energy transition is in full pace, fostering electrification of urban mobility and a zero-emission urban mobility system. Charging stations' business models and options are a top priority. However, urban policies support hydrogen options as well. Multi-modal urban transport dramatically improves the consolidation of urban flows and therefore takes a central place in urban policy, together with automation by self-driving pods and electric vehicles. The city promotes innovative vehicles, services and shared business models for both passenger and freight transport, as well as smart-city technologies, resulting in dramatic reductions of traffic levels, travel times, transport costs and related emissions. The quality of the

environment is very good. Individuals, especially young people, increasingly leave their car at home.

### 1.1.2 Scenario 2- The grim city



Figure 1 Padua scenario 1: The modular and sustainable city

In 2030, urban sustainability in Padua has little public support and a de-regulation framework is in place. Residents complain that in the middle ages traffic was better. Online shopping is skyrocketing, and home deliveries are totally out of control. Traditional business models do not work anymore as customers are not willing to wait a long time for their deliveries. Due to delivery vans everywhere, parking has become difficult and the lack of parking areas leads to more and more shop closures. The accessibility of the city centre dramatically drops for both passenger and freight transport, causing long daily traffic jams on secondary roads, which becomes a major political issue. Even the trams are continuously blocked in Riviera Ponti Romani due to the delivery anarchy.

As the IT network is plagued by flaws, new employment arrangements cannot be implemented. Electrification schemes for vehicles stop and automation is brought to a halt by regulation. The environmental quality reaches new negative records and liveability drops dramatically. Padua has become a bad practice in Europe.



Figure 2 Padua scenario 2: The grim city

### 1.1.3 Scenario 3- Catching on sustainability

In 2030, the allocation and management of urban space for sustainable modes of transport is a high priority in Padua. The plan for the installation of charging stations in peripheral areas is completed and with the launch of the second line from Sarameola to Vigonza, the tram network of greater Padua is now completed. The last diesel buses are retired by Busitalia Veneto and in the centre only electric cars are permitted. Government regulations however do not grant access to autonomous vehicles in historic centres and trams cannot be autonomous either. Innovative business models are steadily developed, causing a modal shift towards public transport, bike-sharing, trams and scooters, but safety still represents a concern. Some even regard the combination of bike sharing and e-micromobility as a road safety failure due to too many accidents in the centre.

Urban logistics is going through a profound network reconfiguration to effectively cope with the skyrocketing demand caused by on-line shopping, but traditional shops in the city centre are forced to change their roles and many close. Yet, monopolistic trends in last-mile logistics market imply that home deliveries are no longer provided at low cost and lead times are more relaxed. The energy transition is in full pace, fostering electrification of urban mobility and a zero-emission urban mobility system, but urban policies support hydrogen options as well.

The quality of the environment is very good. Individuals, especially young people, increasingly leave their car at home. Automation, however, is stalling due to regulatory concerns



Figure 3 Padua scenario 3: Catching on sustainability