

Operational plan eHUBs Leuven

DELIVERABLE 4.1

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Summary sheet

| | |
|------------------------------|---|
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Project partners

| Organisation | Abbreviation | Country |
|--|---------------------|-----------------|
| Gemeente Amsterdam | AMS | The Netherlands |
| Promotion of Operation Links with Integrated Services aisbl (POLIS) | POLIS | Europe |
| Taxistop asbl | Taxi | Belgium |
| Autodelen.net | Auton | Belgium |
| Bayern Innovativ GmbH | BI | Germany |
| Cargoroo | CA | The Netherlands |
| URBEE (E-bike network Amsterdam BV) | URBEE | The Netherlands |
| Gemeente Nijmegen | NIJ | The Netherlands |
| Transport for the Greater Manchester | TfGM | Great Britain |
| Stad Leuven | LEU | Belgium |
| TU Delft | TUD | The Netherlands |
| University of Newcastle upon Tyne | UN | Great Britain |
| Ville de Dreux | DR | France |
| Stadt Kempten (Allgäu) | Kemp | Germany |
| Universiteit Antwerpen | UAntwerp | Belgium |

Document history

| Version | Date | Organisation | Main area of changes | Comments |
|----------------|-------------|---------------------|-----------------------------|---|
| 0.1 | | Stad Leuven | First draft | |
| 0.2 | 30/06/2020 | Stad Leuven | Second draft | Modifications due to more in depth internal dialogue as well as with mobility providers |
| | | | | |

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1. Introduction

Leuven has the ambition to become climate neutral. Scientific research for Leuven, published in 2013, indicated that motorised traffic is responsible for 25% of the CO2 emissions in Leuven. The growth of the economy, the population and increase of habitation density in the inner city has and will continue to create a growth in required mobility. Decreasing emission due to traffic has potential to have a large impact on the road to a climate neutral city.

Goals for Leuven are:

- A reduced need for mobility services
- A transition towards the use of more sustainable mobility options
- Application of technological advancements towards the use of renewable energy

The way forward is to prioritise soft mobility options together with public transport. Leuven is adjusting towards better soft mobility infrastructure and a better offer of public transport. The inner city has become car-shy and in some parts even car-free. A circulation-plan has the goal to reduce cars in the inner city. The plan consists of several loops leading in and out of the city, passing one of several parking opportunities. There are no options for crossing through the inner city from one part to the other, using a car.

This project focuses on the promotion, deployment and implementation of shared e-mobility modes that are maximally organised in e-hubs. These are the concrete project targets for Leuven:

- Number of eHubs: 50
- Shared e-cargo-bikes (Cargoroo): 30
- Shared e-bikes (Urbee): 60
- Other shared LEV: 30
- Shared e-car capacity: 50

The deliverable D.T.2.1 Strategic method / procedure for selection / implementation of eHUBs describes the methods used to determine locations and the offer. This operational plan will illustrate the outcome of these processes and apply them to the Leuven situation.

2. Location determination

The map below shows where the e-hubs are planned.

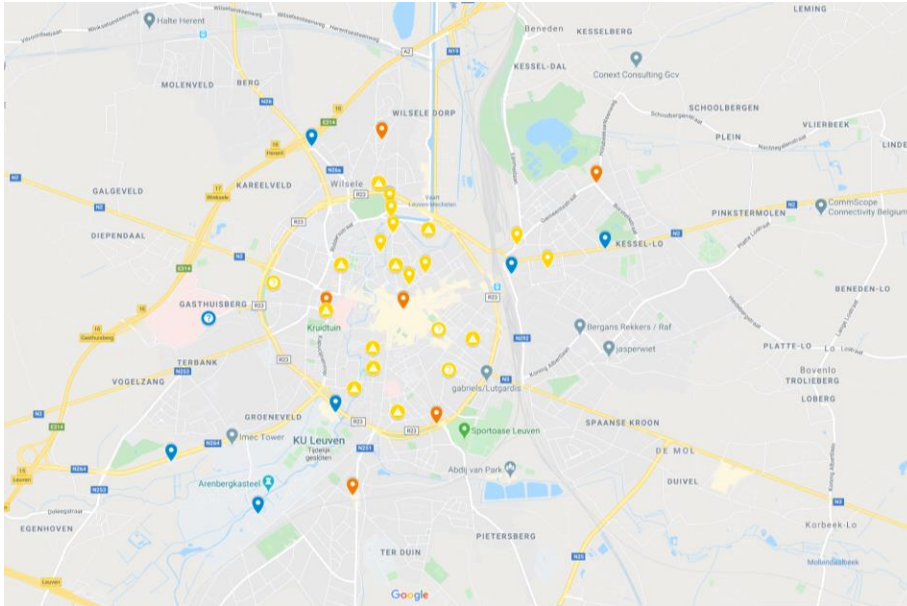


Figure 1: Map with planned locations of eHUBs in Leuven

The table below provides an overview of the planned eHUBs for Leuven. At this stage we are still considering more than 50 locations. The 50 locations that will give most added value will be retained. The ID refers to the location. The e-hubs are ordered in alphabetical order of this location. The three letter prefaces HEV, KLO, LEU, WIJ and WIL indicate the respective sub municipality the eHUB is situated in, i.e. Heverlee, Kessel-lo, Leuven, Wijgmaal and Wilsele.

The type of eHUB is also indicated, being (1) interregional, (2) regional and (3) local/neighbourhood.

An XY-coordinate is available when the specific location has been determined already. Leuven selected the majority of locations through strategic evaluation. Some local eHUBS are located a certain spot thanks to a bottom-up participation process with specific neighbourhoods; other local eHUBS are strategically located, but further elaborated with a neighbourhood participation process (see last column of table 1.

| N° | ID | Sub-municipality | Type eHUB | XY-coordinate | Strategic or bottom-up |
|----|---------------------------------------|------------------|-----------|------------------------|------------------------|
| 1 | Arenberg I (wetenschapspark) | HEV | 2 | | Strategic |
| 2 | Arenberg II (Celestijnenlaan-kasteel) | HEV | 2 | | Strategic |
| 3 | Arenberg III (sportkot) | HEV | 2 | | Strategic |
| 4 | Barbarahof | LEU | 3 | | Bottom-up |
| 5 | Becker Remyplein | KLO | 2 | 50.884969, 4.718321 | Strategic |
| 6 | Bibliotheek Heverlee | HEV | 3 | 50.888540, 4.700300 | Strategic |

| | | | | | |
|----|--|-----|---|------------------------|---|
| 7 | Bibliotheek Kessel-Lo | KLO | 3 | 50.881788, 4.735255 | Strategic |
| 8 | Bibliotheek Tweebronnen | LEU | 3 | 50.88145, 4.70339 | Strategic |
| 9 | Bibliotheek Wilsele | WIL | 3 | 50.910974, 4.713522 | Strategic |
| 10 | Bodartparking | HEV | 2 | 50.87209, 4.68954 | Strategic |
| 11 | Boudewijnstadion/Heuvelhofpark | KLO | 3 | 50.88463, 4.73121 | Strategic |
| 12 | Bovenlo | KLO | 3 | | Bottom-up |
| 13 | Bruulpark | LEU | 3 | 50.88342, 4.69345 | Strategic |
| 14 | Buurtcentrum Wilsele-dorp | WIL | 3 | 50.890571, 4.698947 | Strategic |
| 15 | Constantin Meunierstraat | LEU | 3 | 50.87024, 4.70169 | Strategic |
| 16 | Damiaanplein | LEU | 3 | 50.87596, 4.69784 | Strategic |
| 17 | Egenhoven centrum | HEV | 3 | 50.860730, 4.660520 | Strategic (with participation of neighbourhood) |
| 18 | Engels plein | LEU | 2 | 50.88854, 4.7003 | Strategic |
| 19 | Gasthuisberg Het Teken | LEU | 2 | | Strategic |
| 20 | Gemeenteplein Kessel-Lo | KLO | 3 | 50.89039, 4.7297 | Strategic (with participation of neighbourhood) |
| 21 | Hal 5 | KLO | 3 | 50.88298, 4.72262 | Strategic |
| 22 | Hertogensite/ Botanico / Minderbroederstraat | LEU | 3 | | Neighbourhood |
| 23 | Kaboutermansstraat | LEU | 3 | | Strategic |
| 24 | Kesseldal | KLO | 3 | | Strategic |
| 25 | Klein Begijnhof | LEU | 3 | 50.8844, 4.6993 | Strategic |
| 26 | Korfbal (A. Dejonghestraat) | KLO | 3 | 50.87706, 4.72772 | Strategic |
| 27 | Matadi buurt | HEV | 3 | | Neighbourhood |

| | | | | | |
|----|---|-----|---|---------------------|---|
| 28 | Naamsepoort (incl E. Ruelensparking) | HEV | 3 | 50.868384, 4.698772 | Strategic |
| 29 | OCMW Leuven (F Lintstraat - Vesaliusstraat) | LEU | 3 | | Strategic |
| 30 | Pakenhof | HEV | 3 | 50.86049, 4.70676 | Strategic |
| 31 | Parkpoort | HEV | 3 | 50.86904, 4.70863 | Strategic (with participation of neighbourhood) |
| 32 | Patattenmarkt | LEU | 3 | 50.88319, 4.70119 | Strategic |
| 33 | Philipssite | HEV | 2 | 50.86863, 4.71274 | Strategic |
| 34 | Quinten Metsysplein | LEU | 3 | 50.87665, 4.71235 | Strategic |
| 35 | Rector de Somerplein | LEU | 3 | 50.87936, 4.70262 | Strategic |
| 36 | Redingenhof | LEU | 3 | 50.87497, 4.69658 | Strategic |
| 37 | Researchpark I (Brabantthal), Haasrode | HEV | 2 | | Strategic |
| 38 | Researchpark II (Interleuvenlaan-Technologielaan), Haasrode | HEV | 2 | | Strategic |
| 39 | Researchpark III, (ambachtenzone), Haasrode | HEV | 2 | | Strategic |
| 40 | Sint-Jacobsplein | LEU | 3 | 50.8797, 4.69075 | Strategic |
| 41 | Sint-Maartensdal | LEU | 3 | 50.88248, 4.70519 | Strategic |
| 42 | Spaanse Kroon | LEU | 3 | 50.86847, 4.72678 | Strategic (with participation of neighbourhood) |
| 43 | Sportschuur Wilsele | WIL | 3 | | Strategic |
| 44 | Station Heverlee | HEV | 2 | 50.86259, 4.69524 | Strategic |
| 45 | Station Leuven centrum | LEU | 1 | | Strategic |
| 46 | Station Leuven Kessel-Lo | KLO | 1 | | Strategic |

| | | | | | |
|----|--------------------------------|-----|---|-------------------|---|
| 47 | Station Wijgmaal | WIJ | 2 | 50.92279, 4.70279 | Strategic(with participation of neighbourhood) |
| 48 | T Windgat Carpool | WIL | 2 | 50.89383, 4.68968 | Strategic |
| 49 | Tervuursepoort | LEU | 2 | 50.87712, 4.68298 | Strategic |
| 50 | Tiensepoort | LEU | 2 | 50.87412, 4.71489 | Strategic |
| 51 | Tweewaters | LEU | 3 | 50.88664, 4.70598 | Strategic |
| 52 | Vaartstraat | LEU | 3 | 50.88666, 4.70167 | Strategic |
| 53 | Victor Broosplein | LEU | 3 | 50.88768, 4.70078 | Strategic |
| 54 | Wilsele dorp (Twaalfmeistraat) | WIL | 3 | 50.89424, 4.69931 | Strategic (with participation of neighbourhood) |
| 55 | Zwembad Wilsele | WIL | 3 | | Strategic |

Table 1: The planned eHUB locations in Leuven

3. Services determination

Table 2 shows per e-hub the baseline (written in red) and the planned e-mobility and other services in Leuven.

3.1. Shared mobility

There are different types of shared mobility offered in Leuven. At this time there are already over 100 shared cars, where the majority are fossil fuelled cars. There are already some regular back-to-one shared bikes (Blue Bike) available at three of the eHUBs: (1) station Leuven front side, (2) station Leuven back side and (3) Heverlee station. This project's focus is on shared e-mobility: e-cars, e cargo-bikes and e-bikes.

The **shared e-cars** are currently provided by two operators: Cambio and Partago. Each car has a specific back-to-one parking space provided, at an electric charging station. The operational plan doesn't include yet information about the details of deployment in 2021; there are 20 extra e-cars foreseen, however their location will be defined in coordination with the service providers at beginning of 2021.

The **shared e-cargo-bikes** are provided by project partner Cargoroo. The system will be back-to-one, utilizing battery swap for charging the vehicles.

The **shared e-bikes** are planned to be provided by project partner Urbee. The system will be back-to-many, utilizing battery swap for charging the vehicles.

The map below shows the present plans of the distribution the light e-mobility services amongst the 55 eHUBS.

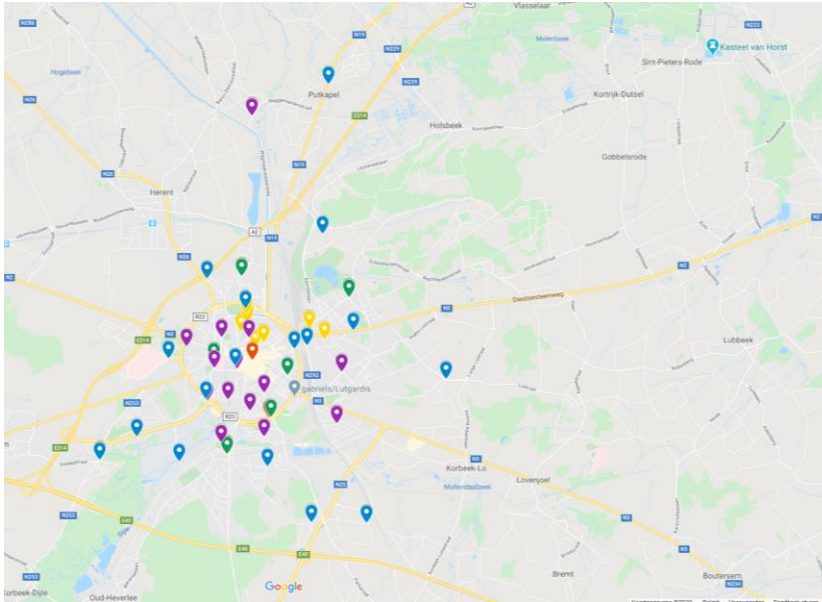


Figure 2: Map with planned LEV at eHUBs in Leuven (yellow, green and purple = shared e-cargo-bikes; red and blue = shared e-bikes)

3.2. Additional services at the eHUBs

It is interesting to cluster diverse services at an e-hub, as these are easily accessible and highly frequented spots.

Shared regular bikes are already provided at 2 eHUBs (2 sides of Leuven station); there are 112 bikes available. It is planned to add on the short term 12 shared bikes on one eHUB, at the station of Heverlee. During the project run, there will be further talks with the provider of shared bikes to discuss possible extensions.

The availability of **public transport** at less than 300 m is of great value for an eHUB. 4

Three **postal lockers** are already present on the public domain. These will be extended by 8 to 10 additional ones, always connected to an eHUB. The exact location still needs to be determined in accordance with the provider.

Storage lockers are already available at two of the eHUB locations. It might be that we still extend the number of storage lockers during the project period.

Bicycle repair points (Fietspunt) are manned stations where people can turn in a bike for repair of minor damage. There are already 4 bicycle repair points operational. This number will be probably extended in connection with an eHUB.

Buggies are available to be utilized (for free) at Buggy Booker points. There are already 2 buggy points operational. There are no concrete plans to extend the number of Buggy Booker points.

| N° | ID | Shar ed e- cars | Shar ed e- carg | Shar ed e- bikes | Regul ar bikes | Public transp ort at | Post al locke r | Stora ge locke r | Bike repai r | Buggy |
|----|----|-----------------------|-----------------------|------------------------|----------------------|----------------------------|-----------------------|------------------------|--------------------|-------|
| | | | | | | | | | | |

| | | | o bikes | | | <300 m | | | | |
|----|--|---|------------|---|--|-----------|---|--|---|---|
| 1 | Arenberg I (wetenschapspark) | | 0 | 5 | | X | | | | |
| 2 | Arenberg II (Celestijnenlaan- kasteel) | | 0 | 5 | | X | | | | |
| 3 | Arenberg III (sportkot) | | 0 | | | X | | | | |
| 4 | Barbarahof | | 1 | 5 | | | | | | |
| 5 | Becker Remyplein | 1 | 1 | | | X | | | | |
| 6 | Bibliotheek Heverlee | 1 | 0 | | | X | | | | |
| 7 | Bibliotheek Kessel-Lo | | 0 | | | | | | | |
| 8 | Bibliotheek Tweebronnen | | 1 | | | X | | | 1 | 1 |
| 9 | Bibliotheek Wilsele | | 0 | | | X | | | | |
| 10 | Bodartparking | | 1 | 5 | | X | 1 | | | |
| 11 | Boudewijnstadion/Heuv elhofpark | 1 | 0 | 5 | | X | | | | |
| 12 | Bovenlo | | 0 | 5 | | X | | | | |
| 13 | Bruulpark | | 1 | | | X | | | | |
| 14 | Buurtcentrum Wilsele- dorp | | 0 | | | X | | | | |
| 15 | Constantin Meunierstraat | | 1 | | | X | | | | |
| 16 | Damiaanplein | | 0 | | | X | | | | |
| 17 | Egenhoven centrum | | 1 | 5 | | X | | | | |
| 18 | Engels plein | | 0 | 5 | | X | | | | |
| 19 | Gasthuisberg Het Teken | | 0 | 5 | | X | | | | |
| 20 | Gemeenteplein Kessel- Lo | | 1 | 5 | | X | | | | |
| 21 | Hal 5 | | 1 | | | X | | | 1 | |

| | | | | | | | | | | |
|----|---|---|---|---|--|---|--|---|--|---|
| 22 | Hertogensite/ Botanico / Minderbroederstraat | | 1 | | | X | | | | |
| 23 | Kaboutermansstraat | | 1 | | | X | | | | |
| 24 | Kesseldal | | 0 | 5 | | X | | | | |
| 25 | Klein Begijnhof | | 1 | | | X | | | | |
| 26 | Korfbal (A. Dejonghestraat) | | 1 | | | X | | | | |
| 27 | Matadi buurt | | 1 | | | | | | | |
| 28 | Naamsepoort (incl E. Ruelensparking) | 3 | 0 | | | X | | | | |
| 29 | OCMW Leuven (F Lintstraat - Vesaliusstraat) | | 1 | | | X | | | | |
| 30 | Pakenhof | | 1 | 5 | | X | | | | |
| 31 | Parkpoort | | 1 | 5 | | X | | 1 | | |
| 32 | Patattenmarkt | | 1 | | | | | | | |
| 33 | Philipssite | | 0 | | | X | | 1 | | |
| 34 | Quinten Metsysplein | | 1 | | | | | | | |
| 35 | Rector de Somerplein | | 1 | 5 | | X | | 1 | | 1 |
| 36 | Redingenhof | | 1 | | | | | | | |
| 37 | Researchpark I (Brabant), Haasrode | | 0 | | | X | | | | |
| 38 | Researchpark II (Interleuvenlaan-Technologielaan), Haasrode | | 0 | 5 | | X | | | | |
| 39 | Researchpark III, (ambachtenzone), Haasrode | | 0 | 5 | | X | | | | |
| 40 | Sint-Jacobsplein | 1 | 1 | 5 | | X | | | | |
| 41 | Sint-Maartensdal | | 1 | | | | | | | |
| 42 | Spaanse Kroon | | 1 | 5 | | X | | | | |
| 43 | Sportschuur Wilsele | | 0 | | | X | | | | |

| | | | | | | | | | | |
|----|-----------------------------------|---|---|---|----|---|---|---|---|--|
| 44 | Station Heverlee | | 1 | 5 | 12 | X | | | 1 | |
| 45 | Station Leuven centrum | | 0 | 5 | 71 | X | 1 | 1 | 1 | |
| 46 | Station Leuven Kessel-Lo | | 0 | 5 | 32 | X | | | | |
| 47 | Station Wijgmaal | | 1 | 5 | | X | | | | |
| 48 | T Windgat Carpool | | 0 | 5 | | X | | | | |
| 49 | Tervuursepoort | | 0 | | | X | | | | |
| 50 | Tiensepoort | | 0 | | | X | | | | |
| 51 | Tweewaters | | 0 | | | X | | | | |
| 52 | Vaartstraat | | 1 | | | X | | | | |
| 53 | Victor Broosplein | | 1 | | | X | | | 1 | |
| 54 | Wilsele dorp (Twaalfmeistraat) | 1 | 1 | 5 | | X | | | | |
| 55 | Zwembad Wilsele | | 0 | 5 | | X | | | | |

Table 2: An overview of the services offered at the planned eHUBs in Leuven (numbers in red indicate that these services were baseline)

4. Infrastructure

Every eHUB in Leuven will be branded as a Mobipunt (translated: Mobility Point - Mobipoint), in accordance to the Flemish policy vision.



Figure 3: Official Flemish Mobipoint identity

The idea is to install a **Mobipunt pole** on the majority of the eHUBS. There are three types of poles: (1) digital, (2) analogue or (3) light (see figure 1 for types 1 and 3). Every pole will have a QR code linking to the website with information about all shared mobility operators available at that eHUB.



Figure 4: Planned poles (digital and light) for eHUBS in Leuven (source: Mobipunt vzw)

When a shared e-car is available at an eHUB there will be a shared car parking spot, where a **charging station** is installed for this shared e-car. Charging infrastructure is not exclusive to shared vehicles, but also available for privately owned ones. The operational plan doesn't include yet detailed information about the locations of these shared e-car parking spots in 2021 because they only get planned with the service providers spring 2021.

A **parking spot for shared (e)-cars** is indicated with **green lining** in thermoplast and a **traffic sign** indicating carsharing, as you can see on figure 2.



Figure 5: A shared e-car parking spot (Becker Remy place)

In the initial phase of deploying the eHUBS, there won't be installed any **e-charging station** for e-bikes, nevertheless it might be that charging infrastructure would be installed at a later stage during the project run or in the post-project phase, depending on further partnership with the LEV providers.

Shared light electric vehicles require **stalling infrastructure**. Leuven has opted to use the regular Leuven bike racks to safeguard uniformity of the public domain. Each rack can hold two vehicles, they are spaced 1.5 metres apart. For back-to-one vehicles such as the e-cargo bikes, one rack for two vehicles will be sufficient. For a back to many system such as the e-bikes, additional storage needs to be provided to guarantee flexibility. The standard number of e-bikes per eHUB is 5; Leuven plans to foresee storage capacity for 2 extra e-bikes or 1 extra bike rack.



Figure 6: Bike racks and specific signpost for shared light electric vehicles

The infrastructure for the postal and storage **lockers** still needs to be discussed with the respective service provider once the selection of service provider is made. On table 2 can be seen at which eHUBs this facility is planned.

The present infrastructure for **bike repair** can be seen on the picture below (figure 7); it is not yet clear whether this service will be more widely distributed and how it will look like.



Figure 7: Present bike repair infrastructure at the eHUBs

It will be very important to pay enough attention for **proper signposting** so that the shared mobility service user easily recognizes the eHUB and the private mobility service user is discouraged to use this mobility zone.

Table 3 shows per e-hub in Leuven the baseline (written in red) and the planned infrastructure, focusing on the Mobipunt poles, parking space for e-cars, charging station for e-cars and bike racks for shared e-bikes and e-cargobikes.

| N° | ID | Mobipunt pole: Digital, Analogue or Light | Parking spots for shared e- cars (including charging station) | Number of bike racks for shared e- (cargo)bikes |
|----|---------------------------------------|--|---|---|
| 1 | Arenberg I (wetenschapspark) | A | | 4 |
| 2 | Arenberg II (Celestijnenlaan-kasteel) | L | | 4 |
| 3 | Arenberg III (sportkot) | L | | |
| 4 | Barbarahof | L | | 5 |
| 5 | Becker Remyplein | A | 1 | 1 |
| 6 | Bibliotheek Heverlee | A | 1 | |
| 7 | Bibliotheek Kessel-Lo | L | | |
| 8 | Bibliotheek Tweebronnen | A | | 1 |
| 9 | Bibliotheek Wilsele | A | | |
| 10 | Bodartparking | A | 1 | 5 |
| 11 | Boudewijnstadion/Heuvelhofpark | A | 1 | 4 |
| 12 | Bovenlo | L | | 4 |
| 13 | Bruulpark | A | | 1 |
| 14 | Buurtcentrum Wilsele-dorp | L | | |
| 15 | Constantin Meunierstraat | L | | 1 |
| 16 | Damiaanplein | L | | |
| 17 | Egenhoven centrum | A | | 5 |
| 18 | Engels plein | A | | 5 |
| 19 | Gasthuisberg Het Tekan | A | | 4 |

| | | | | |
|----|---|---|---|---|
| 20 | Gemeenteplein Kessel-Lo | L | | 5 |
| 21 | Hal 5 | L | 1 | 1 |
| 22 | Hertogensite/ Botanico / Minderbroederstraat | L | | 1 |
| 23 | Kaboutermansstraat | L | | 1 |
| 24 | Kesseldal | L | | 4 |
| 25 | Klein Begijnhof | L | 1 | 1 |
| 26 | Korfbal (A. Dejonghestraat) | L | 1 | 1 |
| 27 | Matadi buurt | L | | 1 |
| 28 | Naamsepoort (incl E. Ruelensparking) | A | 3 | |
| 29 | OCMW Leuven (F Lintstraat - Vesaliusstraat) | L | | 1 |
| 30 | Pakenhof | A | | 5 |
| 31 | Parkpoort | A | 1 | 5 |
| 32 | Patattenmarkt | L | | 1 |
| 33 | Philipssite | L | | |
| 34 | Quinten Metsysplein | L | | 1 |
| 35 | Rector de Somerplein | L | | 5 |
| 36 | Redingenhof | L | | 1 |
| 37 | Researchpark I (Brabantthal), Haasrode | A | | |
| 38 | Researchpark II (Interleuvenlaan-Technologielaan), Haasrode | L | | 4 |
| 39 | Researchpark III, (ambachtenzone), Haasrode | L | | 4 |
| 40 | Sint-Jacobsplein | L | 1 | 5 |
| 41 | Sint-Maartensdal | A | 1 | 1 |
| 42 | Spaanse Kroon | L | | 5 |
| 43 | Sportschuur Willsele | L | | |

| | | | | |
|----|--------------------------------|---|---|---|
| 44 | Station Heverlee | D | | 5 |
| 45 | Station Leuven centrum | D | | 4 |
| 46 | Station Leuven Kessel-Lo | A | | 4 |
| 47 | Station Wijgmaal | D | 2 | 5 |
| 48 | T Windgat Carpool | A | | 4 |
| 49 | Tervuursepoort | A | 2 | |
| 50 | Tiensepoort | A | 1 | |
| 51 | Tweewaters | L | | |
| 52 | Vaartstraat | L | | 1 |
| 53 | Victor Broosplein | L | | 1 |
| 54 | Witsele dorp (Twaalfmeistraat) | A | 1 | 5 |
| 55 | Zwembad Witsele | A | | 4 |

Table 3: An overview of the infrastructure at the planned eHUBs in Leuven (numbers in red indicate that these services were baseline)

5. Deployment

Leuven opts for a phased approach of deployment, according with the availability of (1) the necessary infrastructure at the eHUB, (2) the (light) electric vehicles and (3) the additional services.

Leuven did start up this eHUB project with 10 eHUBs in the baseline. 3 HUBs are located at a train station, ie Station Leuven and station Heverlee. 7 eHUBs are serviced with the infrastructure for 1, 2 or 3 e-cars, but the e-cars are not yet available.

Leuven distinguishes 4 phases in deployment:

5.1. Phase 1: Quarter 2 of 2019

5 eHUBS get operational with 1 e-car and 1 eHUB got 3 e-cars, 8 in total. The electric cars are provided by 2 operators, 5 by Cambio and 3 by Partago.

- Number of eHubs: 10
- Shared e-cargo-bikes (Cargoroo): 0
- Shared e-bikes (Urbee): 0
- Shared e-cars: 8

5.2. Phase 2: Quarter 2 of 2020

Based on the availability of e-cargo bikes, i.e only 9 Cargoroo bikes in June 2020, 8 new eHUBS will be deployed. 1 of these Cargoroo bikes will be added at an existing eHUB (phase 1); the other 8 Cargoroo bikes will be installed at new eHUBS.

- Number of eHubs: 18
- Shared e-cargo-bikes (Cargoroo): 9
- Shared e-bikes (Urbee): 0
- Shared e-cars: 8

5.3. Phase 3: Quarter 3-4 of 2020

Based on the availability of e-cargo bikes, i.e only 6 Cargoroo bikes and the availability of e-bikes, i.e only 30 Urbee bikes in September 2020, 7 new eHUBS will be deployed. 3 of these Cargoroo bikes will be added at an existing eHUB; the other 3 Cargoroo bikes will be installed at new eHUBS. 20 of these Urbee e-bikes will be added at an existing eHUB, the other 10 e-bikes will be installed at new eHUBS.

By the end of 2020, depending on the availability of charging infrastructure and signposting for e-cars, 9 additional e-cars will be deployed, 8 from Cambio and 1 from Partago.

- Number of eHubs: 25
- Shared e-cargo-bikes (Cargoroo): 15
- Shared e-bikes (Urbee): 30
- EV car capacity: 17

5.4. Phase 4: Quarter 1-2 of 2021

Based on the availability of e-cargo bikes by the end of June 2021, 3 of these 15 Cargoroo bikes will be added at an existing eHUB; the other 12 Cargoroo bikes will be installed at new eHUBS.

Based on the readiness of e-bikes for the eHUBS in Leuven by March 2021, 19 new eHUBS will be deployed with 95 e-bikes. 30 of these e-bikes will be added at an existing eHUB, the other 65 e-bikes will be installed at new eHUBS.

By the end of June 2021, depending on the availability of charging infrastructure and signposting for e-cars, 20 additional e-cars will be deployed on eHUBS.

- Number of eHubs: 50
- Shared e-cargo-bikes (Cargoroo): 30
- Shared e-bikes (Urbee): 125
- EV car capacity: 37

6. Implementation

The context, strategy and operational targets of eHUBS need to be well understood and supported by the local government.

Therefore meetings between the administration and the cabinet are frequently organized to have a constructive dialogue leading to deliberate decisions.

The eHUBS also need to respond positively to a number of characteristics in order to be warmly welcomed by Leuven citizens:

- Future proof
 - Enabling the transition to climate neutral and sustainable mobility
 - Using solid and innovative materials and technologies
- Accessible
 - Responding to the network or the neighbourhood logic
 - Fitting in the ideology of “Mobility for all”
- User-friendly
 - Generating added value for a diverse range of customer journeys
 - Being clearly signposted
 - Giving update (realtime) information about the mobility offer
 - Making possible instant use: app (preferentially MAAS), subscription, ...

At the stage of getting the eHUBS operational, full attention will be paid to comply with these criteria.

The eHUBS will be promoted by particular communication activities and specific and non-specific events.

7. Communication

The communication strategy about eHUBS puts emphasis on getting behavioural changes about the use of mobility services, trying to break with old customs in favour of climate-friendly, user-friendly, efficient and pleasant new modes of transport.

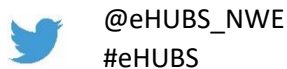
Leuven will try its best to share information about the eHUBS, their context, targets, strengths, opportunities, failures and challenges, within diverse communication channels.

- On its website: <https://www.leuven.be/mobipunten>
- In the monthly newsletter: LVN magazine
- In news media
- In the e-newsletter
- On its social media: facebook and twitter
- At local, regional, national and international events

More details are provided in the communication plan regarding eHUBS in Leuven.

8. The eHUBS Consortium

The consortium of eHUBS consists of 15 partners with multidisciplinary and complementary competencies. This includes European cities, leading universities, networks and electric and shared mobility providers.



For further information please visit <http://www.nweurope.eu/ehubs>



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