



Partnership Evaluation Report: **EIT Urban Mobility (EIT-UM)**

Horizon Europe and the Green Transition
Interim evaluation support study

Independent
Expert
Report



Research and
Innovation

Partnership Evaluation Report: EIT Urban Mobility (EIT-UM)

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EIT Urban Mobility (EIT-UM)

Horizon Europe and the Green Transition
Interim evaluation support study

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Acronyms and glossary

| Acronym | Meaning |
|---------|---|
| AIG | Action Impact Group (now Horizon Lab) |
| CEO | Chief Executive Officer |
| CFO | Chief Financial Officer |
| CLC | Co-Location-Centre |
| CO2 | Carbon Dioxide |
| DG | Directorate General |
| DG MOVE | Directorate General for Mobility and Transport |
| DG R&I | Directorate General for Research and Innovation |
| EC | European Commission |
| ECORDA | External Common Research Data Warehouse |
| EDUM | European Commission's Expert Group on Urban Mobility |
| EIC | European Innovation Council |
| EIT | European Institute of Technology |
| ERA | European Research Area |
| ERRIN | European Regions Research and Innovation Network |
| ERTICO | European Road Transport Telematics Implementation Organisation-Intelligent Transport Systems & Services Europe Coordination |
| EU | European Union |
| FS | Financial Sustainability |
| GHG | Greenhouse Gas |
| H2020 | Horizon 2020 |
| HEU | Horizon Europe |
| ICLEI | International Council for Local Environmental Initiatives |
| IH | Innovation Hub |
| KAVA | KIC Added Value Activities |
| KCA | KIC Complementary Activities |
| KIC | Knowledge and Innovation Community |
| KPI | Key Performance Indicator |
| KSO | Key Strategic Objective |
| MOOC | Massive Open Online Course |
| MSC | Master of Science |
| MT | Management Team |
| NCP | National Contact Point |
| NGO | Non-Governmental Organisation |
| PhD | Doctor of Philosophy |
| RAPTOR | Rapid Application for Transport |
| R&I | Research and Innovation |
| RIS | Regional Innovation System |
| RIS3s | Research and Innovation Smart Specialisation Strategies |
| RoI | Return on Investment |
| SDG | Sustainable Development Goal |
| SFOC | Short Free Online Course |
| SMEs | Small and Medium Size Enterprises |
| SO | Strategic Objective |
| ToC | Theory of Change |
| TRL | Technology Readiness Level |
| UK | United Kingdom |
| UM | Urban Mobility |
| USA | United States of America |
| USP | Unique Selling Proposition |

EIT URBAN MOBILITY

1. Executive Summary

This evaluation report analyses the KIC “EIT Urban Mobility” (EIT-UM) under the criteria of relevance, coherence, efficiency, effectiveness, EU added value, additionally, directionality, international positioning and visibility, transparency and openness as well as phasing out preparedness of the partnership in relation to Horizon Europe Green Transition objectives.

EIT-UM cooperates with partners from higher education, the research and the business sector to develop innovative solutions for tackling urban mobility problems by increasing the efficiency and sustainability of transporting people, goods and waste in innovative ways, thus creating liveable urban spaces. Its activities serve the purpose of achieving three societal impact goals, namely (i) to improve the quality of life in cities, (ii) to mitigate and adapt to climate change, and (iii) job creation and strengthening of the European urban mobility sector.

EIT-UM is a young KIC from the 4th wave of new KICs. It was officially inaugurated in 2019, and its first operational activities and calls were launched in 2020. Many of the planned activities stipulated by the EIT-UM's business plan are currently being rolled out. Several institutional arrangements are still in the roll-out phase.

The unique selling points of EIT-UM are the creation of transnational innovation ecosystems in the field of urban mobility, its focus on start-ups and the training of human competences for future challenges in the urban mobility sector. From a thematic point of view, EIT-UM offers alternative perspectives and focal points that complement or expand Horizon Europe's activities without losing sight of the direction of the overall objectives of Horizon Europe's Strategic Plan. Especially with its explicit urban focus in the field of mobility and its inclusion of cities as partners and testbeds for technical and social innovations, it creates opportunities that would otherwise have to be laboriously worked out in the mainstream of collaborative Horizon Europe projects. However, the Driving Urban Transition partnership and the Cities Mission have a similar thematic focus but with different approaches. In this respect, there is a clear awareness of EIT-UM to ensure that synergies are created and duplications are avoided.

Given the early stage of EIT-UM, we can nevertheless state that EIT-UM has been, in its very early years of operation, particularly effective in (i) supporting start-ups, in (ii) its educational activities (especially in the direction of professional qualifications) and in (iii) knowledge exchange (e.g. through the annual ‘Tomorrow Mobility World Congress’, which attracts 15,000 and more participants). The first pilots of new processes and products, which involved companies, start-ups, research organisations, universities and citizens; the latter also involved living labs, could take place in concrete urban spaces, and more than 150 market-ready mobility solutions by innovative entities are available on the digital platform.

The findings of this evaluation confirm that EIT-UM is clearly aligned with the EU's green transition agenda and with the priorities of DG MOVE. Through its integrative knowledge triangle and ecosystems' development approach, EIT-UM is a potentially valuable instrument to further the objectives of Horizon Europe.

This report starts by presenting the governance structure and intervention logic of EIT-UM. Then, the implementation state of play is described in detail. The findings section summarises

the results of this evaluation along the criteria mentioned above. Finally, conclusions are drawn and recommendations provided.

2. Introduction

2.1. Objective of the Report

This report on the partnership “EIT Urban Mobility” (EIT-UM) is part of the ex-post evaluation of H2020 and the interim evaluation of Horizon Europe activities related to a green transition. It focuses on the first years of the inception of EIT-UM, i.e. a timeframe for the transition from Horizon 2020 to Horizon Europe. Due to its young history, EIT-UM anticipated from its inception the programmatic and thematic orientation of Horizon Europe.

In Horizon 2020, EIT-UM would have related to Societal Challenge(s) “Transport” and “Energy”, but its operationalization and financing of its activities started mainly under Horizon Europe. In Horizon Europe, EIT-UM relates thematically mostly to the cluster “Climate, Energy & Mobility” of Pillar II of Horizon Europe. The European Institute of Innovation & Technology (EIT) itself is part of Pillar III of Horizon Europe, which aims to foster all forms of innovation, including breakthrough innovation and market deployment of innovative solutions.

The report provides evidence on the relevance, coherence, effectiveness, EU-added value and additionality, directionality, international positioning and visibility, transparency and openness, and phasing out preparedness of the partnership concerning the Horizon Europe objectives targeting the Green Transition.

2.2. Methodology

This partnership report follows the principles of a case study analysis and comprises a mixed-method analysis of both quantitative and qualitative data concerning the activity portfolio of the institutionalised partnership. The time horizon covered with the analysis is 2020-2023.

The quantitative data comprises an analysis of the project portfolio of the institutionalised partnership based upon ECORDA (cut-off date March 2023). The time horizon covered with the analysis is 2020-2022, sincere that there were no EIT-UM activities before 2020.

The data collection process for the partnership evaluation comprised two phases, incorporating information from both H2020 and the initial phase of the partnerships in Horizon Europe. The primary data collection was concluded by July 2023. Supplementary data from the forthcoming Biannual Monitoring Report 2024 was incorporated in December 2023. Due to the short runtime of the Horizon Europe Partnerships, it is noteworthy to bear in mind that many of the partnerships' activities are still ongoing and have not yet been fully accomplished.

The qualitative analysis has consisted of desk research activities and analysis of the partnership's strategic documents and existing monitoring, progress and evaluation reports and other available documents online, also provided by the partnership itself and interviewees.

Seven targeted semi-structured interviews with representatives from EIT-UM and other stakeholders have been performed to gain additional insights and validate the findings of the analysis. The interviews have followed a semi-structured, exploratory approach, based upon guidelines referencing the evaluation questions in focus.

At this stage, one interview was carried out in November of 2022 as part of the first phase and six more interviews from June to August 2023 as part of the second phase:

- EU Affairs Manager of EIT-UM
- Former Head of City Network of EIT-UM
- Director of Academy of EIT-UM
- Director of Innovation of EIT-UM
- Head of Executive and Strategic Office of EIT-UM
- National Policy Maker responsible for EIT
- National Contact Point for EIT-UM

A detailed description of the methods used can be found in Annex B of the main report.

3. Implementation state of play

3.1. EIT-UM's KAVA 2020-2022

Tab. 1 shows all EIT-UM Added Value Activities (so-called KAVA) carried out since 2020. In total, the database contains 270 KAVAs from 2020 to 2022 for EIT-UM. Additionally, 42 complementary activities were carried out in 2020¹.

Most KAVA started in 2020, when the operations of EIT-UM kicked-off. Since some of these KAVA are lasting more than one single year, the number of active KAVA is constantly increasing, but the number of new KAVA per year decreases. All other indicators show an increase between 2020 and 2022. The number of partners involved in the execution of KAVA increased from 132 in 2020 to 226 in 2023. This corresponds to a growth rate of 171%. Compared to the increase in partners involved, the growth rate of KAVA participation was lower in the period between 2020 and 2022 (132%), which can be attributed to the fact that some partners became active several times in different KAVAs.

Table 1: EIT-UM summary data on the number of KAVA

| KIC | Year | Nb of KAVA Activities | Nb new KAVA Activities | Nb of Comp. Activities | Nb Partners | Nb Participations | Nb Countries |
|----------------|------|-----------------------|------------------------|------------------------|-------------|-------------------|--------------|
| Urban Mobility | 2022 | 113 | 55 | N/A | 226 | 548 | 32 |
| Urban Mobility | 2021 | 72 | 72 | N/A | 138 | 370 | 25 |
| Urban Mobility | 2020 | 85 | 85 | 42 | 132 | 414 | 20 |

Notes: Data update in August 2023.

¹ The complementary activities concept has been abandoned in 2020 and is not anymore applied. Instead, the NEFA (non-EIT Funded Activity) is in place.

The assignment of KAVAs to years was based on each excel file provided to the evaluation team containing annual data of each KIC. The exception refers to the data provided for the period 2021-2022, which was included in a common excel file in which KAVAs were primarily assigned to the period 2021-2022 and not each year individually. In these cases, KAVAs starting in 2021 or before and ending in 2021 or after were assigned to 2021, and KAVAs starting in 2022 or before and ending in 2022 or after were assigned to 2022 (note that KAVAs can be assigned to 2021 and 2022 following this rule, which aligns to the excel files provided for previous years, in which the same KAVA can repeat across different years).

The number of countries from which KAVA partners come has continuously expanded. While in 2020, participants from 20 countries were active, in 2022, there were already participants from 32 countries. The value is among the highest of all KICs examined.

Table 2: Total funding for KAVA differentiated by years

| Urban Mobility | Year | Funding for KAVA |
|-----------------------|-------------|-------------------------|
| Urban Mobility | 2022 | 47 385 806 |
| Urban Mobility | 2021 | 28 436 161 |
| Urban Mobility | 2020 | 27 587 611 |

Notes: Data update in August 2023.

Table 2 shows the total funding for KAVA implemented under EIT-UM. The funding for the 270 KAVA during 2020 and 2022 amounted to €103.4 million, which is low compared to the funding allocated by the other KICs during 2020 and 2022.

The average funding per participation in 2022 was almost €90,000 in EIT-UM in 2022. The value is only one-sixth of the corresponding value for KIC-Energy and only half of the benchmark for KIC-Climate. Only KIC-Food has a similar figure of just under €120,000 in terms of funding per participation. This relatively small funding per participation seems to be a peculiarity of KIC-UM. At the same time, the activity level of EIT-UM is quite high compared to the other scrutinised KICs (KIC-Climate, KIC-InnoEnergy and KIC-Food).

Table 3 shows the different funding sources for the EIT-UM KAVA activities, which have been funded or co-funded by EIT. The share of EIT funding for these activities was relatively high in the first year of EIT-UM's operation (16.67%) but dropped to 12%-13% in the subsequent two years.

Table 3: Funding sources for KAVA activities co-funded by EIT

| Year | Funding for KAVA activities by EIT co-funded | | | | | | | |
|------|--|--------------|------------------------------|-------------------------------|-------------------|-----------------|---------------|-------------------------------|
| | All activities | | | | | | | |
| | EIT (mio) | KIC Partner | European Community (non-EIT) | Receipts: National / Regional | Receipts: Private | Receipts: Other | Total Funding | Share of non-EIT funding in % |
| 2022 | 47.386 | 6 857 709 | 0 | 20 381 | 1 226 | 10 390 | 54.276 | 12,69 |
| 2021 | 28.436 | 3 840 163 | 0 | 121 896 | 128 750 | 0 | 32.527 | 12,58 |
| 2020 | 27.587 | 5 497 847 | 0 | 0 | 0 | 21 000 | 33.107 | 16,67 |

Notes: Data update on 2nd August 2023.

This table classifies KAVA by receiving funding from EIT in a given year. Therefore, if a KAVA has received EIT funding, all funding sources of this KAVA are presented in the column EIT co-funded activities.

Table 4 provides an overview of the types of activity carried out from 2020 until 2022 by EIT-UM, as well as the funding spent for these types of activity. 37.6% of the total funding during 2020 and 2022 was dedicated to the activity area “Innovation and Research”. Between 2020 and 2022, more than twice as much funding was allocated to this type of activity than to the second most frequently funded activity type “Entrepreneurship” (16.17%), followed by “Education” (15.62%), “Other” (15.04%), Management (14.42%) and “EIT RIS AL2” (1.12%). The average spending for one “Innovation and Research”-activity during 2020 and 2022 was €634,486. The corresponding average spending for one “Entrepreneurship”-activity was €539,937, and for one “Education”-activity, €225,855. The latter was slightly lower than the average yearly spending between 2020 and 2022 for the activity types “Other” and “EIT RIS AL2”. The funding distribution over the years fluctuates; especially the yearly average funding for “Management”-activities increased sharply since 2020. The average funding for one entrepreneurship-activity exploded in 2022 compared to the previous years.

Table 4: Number and spending for activities differentiated by activity areas (EIT and other sources combined)

| Urban Mobility | Number of activities | | | Funding | | |
|--|----------------------|-------------|-------------|-------------------|-------------------|-------------------|
| | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 |
| Activity Area | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 |
| Number of activities - Any type | 85 | 72 | 113 | 33 106 458 | 32 526 971 | 54 591 460 |
| Innovation and Research | 34 | 14 | 28 | 18 002 540 | 11 235 416 | 16 000 367 |
| Entrepreneurship | 12 | 12 | 12 | 4 593 164 | 4 592 836 | 10 251 747 |
| Education | 20 | 27 | 33 | 3 394 472 | 6 178 473 | 9 207 324 |
| Other | 8 | 16 | 37 | 654 941 | 5 347 082 | 12 076 603 |
| EIT RIS AL2 | 2 | 0 | 0 | 1 351 774 | 0 | 0 |
| Management | 9 | 3 | 3 | 5 109 567 | 5 173 164 | 7 055 420 |

Notes: Data update on 2nd August 2023. No funding has been allocated to the activity areas “communication, dissemination and outreach”, “management and coordination”, “EIT-RIS”, and “HEI Capacity Building”.

3.2. Participants, collaboration patterns and networks

For the analysis of the cooperation networks, the following indicators are used on the basis of the available database:

- Funding by country of participants
- Cooperation patterns
- Network interactions

Table 10 (in Annex B) shows that the distribution of funding among the countries from which KAVA participants come is highly skewed. The share of funding for Spain alone is more than 50%. However, it must be taken into account that the EIT-UM headquarters plus one Innovation Hub are located in Spain, and their costs are included there. In total, 42% of the distributed funding was used for the establishment and expansion of EIT-UM's working structures, including its Innovation Hubs. Thus, the third and fourth columns in Table 10 show the funding distribution to countries without funding to the headquarters and the five Innovation Hubs. Nevertheless, among the 32 countries that have received EIT-UM funding, only about half have received more than 1% of the total. This means that half of the countries that participated in EIT-UM KAVA received less than a maximum of € 600,000 in absolute numbers.

Table 5 features the number of collaborations between participants from different sectors in EIT-UM activities. Most participants (#97) in EIT-UM activities in the years 2021/2022 come from the business sector (38%), followed by a sector composed of cities, regions and NGOs (27%) and the higher education sector (25%) as shown in Figure 6. The non-university research sector contributes 7%.

In total, 2,448 collaborations were supported in EIT-UM activities, which is an indication of the high cross-sector mobilisation power of EIT-UM (see Table 5). The corporate sector has a central position in EIT-UM. It is the most important cooperation sector for all other sectors. The 97 business partners, which have 186 participations in 86 KAVA projects, collaborate mostly with the cluster consisting of cities, regions and NGOs (374 collaborations). They also have 313 collaborations with Higher Education Institutions, 224 collaborations with other business partners and 219 collaborations with research organisations.

Overall, a dense network of collaboration links between the corporate sector, the higher education sector, the cities and regions, and the research organisations can be observed in the EIT-UM activities. The KIC LE and Innovation Hubs mostly collaborate among themselves. On average, each university has 3.3 participations in 87 KAVA projects.

The higher education sector collaborates most with the business sector and within the higher education sector. The 17 non-university research organisations have, on average, two participations in 63 KAVA projects. They cooperate most with the business sector, followed by the "Cities, regions and NGOs" and the higher education sector.

Table 5: Cooperation patterns between participants

| Participant area of activity (EIT-UM) | Amount funded | Number of | | | Number of collaborations with | | | | | |
|---------------------------------------|---------------|--------------|----------------|----------------|-------------------------------|-----------------------|--------------|---------------|--------|----------|
| | | Participants | Participations | KAVAs projects | Business | Cities, Regions, NGOs | Higher Educ. | KIC LE & CLCs | Others | Research |
| Business | 23 825 906 | 97 | 186 | 86 | 224 | 374 | 313 | 33 | 10 | 219 |
| Cities, Regions, NGOs | 9 059 698 | 68 | 133 | 54 | | 155 | 212 | 10 | 8 | 188 |
| Higher Education | 25 423 415 | 63 | 211 | 87 | | | 307 | 52 | 9 | 159 |
| KIC LE & CLCs | 50 654 444 | 6 | 88 | 47 | | | | 104 | 0 | 15 |
| Others | 118 213 | 2 | 4 | 4 | | | | | 0 | 8 |
| Research | 11 143 212 | 17 | 102 | 63 | | | | | | 48 |

Note: Data update on 2nd August 2023.

Figure 4 in Annex B shows the network interactions of partners participating in EIT-UM activities in the years 2021/2002. Spain has a very central position among the 32 countries caused of its headquarters located in Barcelona and its corresponding activities, including the operation of an Innovation Hub. Strong Spanish ties exist with The Netherlands, Germany and Italy, but also Portugal, Hungary, the Czech Republic, Denmark, Sweden, Greece, Belgium and France. Strong connections also exist between Germany and The Netherlands as well as Italy. The most central countries are Spain, Germany, The Netherlands and Italy.

3.3. Knowledge valorisation

For the analysis of the knowledge valorisation results of EIT-UM, the following indicators are used on the basis of the available database:

- Type of applied intellectual property rights
- Revenue for innovations
- Number of supported start-ups and investment attracted by the EIT-UM start-ups

Unfortunately, the available statistics on applied IPR by EIT-UM are of limited significance (see Table 11 and Table 12 in Annex B). Almost all IPRs fall under the category “other” (n= 88). With the exception of two trademark applications, no patents, no registered designs, and no utility models have been applied for under EIT-UM. The category “others” contains, for example, secrecy and technology translation agreements. The lack of applications in the other categories, especially patents, is conspicuous compared to the other KICs surveyed. Unfortunately, there are no IPR targets, so it is not possible to determine whether the valorisation targets related to IPRs have been met.

Moreover, 50 of the 88 “other” IPR applications cannot be assigned to any country of the IPR owner. The two trademark applications and 12 “other” IPR applications are assigned to IPR

owners from Spain. Other notable IPR application accumulations in the category “other” can be assigned for IPR owners in Italy, Türkiye, France and Greece.

More revealing data than on IPR are data on revenues from new or improved products/services/processes from KIC activities. In this respect, there was a considerable increase between the years 2021 and 2022 (see Table 6).

Table 6: Total revenue of new or improved product/service/process received from KIC

| KIC | Period | Revenue |
|---------------------------|------------------|-------------------|
| EIT Urban Mobility | 2021 | 17 370 562 |
| EIT Urban Mobility | 2022 | 28 645 399 |
| EIT Urban Mobility | 2021-2022 | 46 015 961 |

Note: Data were directly given to the author by EIT-UM ²

As regards the number of start-ups supported by EIT-UM, the original - already high - target was even exceeded. 472 start-ups could be supported by EIT-UM during 2021 and 2022 (see Table 7). The gender distribution is not very meaningful because a large group of the CEOs or owners of the start-ups cannot be assigned in a binary way. It can be assumed that men predominate by far, but 89 of the 472 start-ups are headed by women, too. However, EIT UM’s latest figures show that out of EIT-UM 127 portfolio investments accumulated since the beginning, 43% are indeed either founded, led or have women on their managing board. A meaningful positive difference in comparison to the industry average of 18%, according to the Report on Women Entrepreneurs in Europe.³

Table 7: Number of Start-Ups supported by EIT UM during 2021 and 2022

| KIC | Target | Achieved | Gender of the owner/CEO | | |
|--------------------|---------------|-----------------|--------------------------------|-------------|--------------|
| | | | Female | Male | Other |
| EIT Urban Mobility | 345 | 472 | 89 | 257 | 126 |

Note: Data extracted from the database provided by the EIT members for this project.

As shown in Table 13 in Annex B, the countries of registration of these supported start-ups are widely spread. In 2021 and 2022, start-ups from 44 countries were supported. This includes countries associated with Horizon Europe, such as Bosnia and Herzegovina, Israel, Serbia or Tunisia, as well as third countries, such as Australia, Canada, India, Nepal, the Russian Federation, Switzerland, the UK or the USA. Most supported start-ups were from Germany (57), followed by Spain (41) and Türkiye (32).

The investments that EIT-UM start-ups could attract during 2021-2022 were well above the originally assumed target (see Table 8). 50% of these investments were to the benefit of EIT-

² The data provided directly by EIT-UM to the author differed significantly from the original data extracted from the database provided by the EIT members for the purpose of this project, which, however, was obviously wrong.

³ <https://www.eiturbanmobility.eu/eit-urban-mobility-investment-portfolio-grows-to-127-ventures/>; accessed on 1 March 2024.

UM-supported start-ups in Denmark. In addition, start-ups from Israel, Türkiye and Sweden could attract investments exceeding € 2 Million.

Table 8: Investment attracted by the EIT KIC start-ups 2021/2022

| KIC | Target | Achieved |
|--------------------|-----------------|-----------------|
| EIT Climate-KIC | € 46 530 000 | € 140 699 194 |
| EIT Food | € 113 460 000 | € 631 676 149 |
| EIT Urban Mobility | € 17 300 000 | € 34 904 077 |
| EIT InnoEnergy | € 1 000 000 000 | € 1 206 469 316 |

Note: Data extracted from the database provided by the EIT members for the purpose of this project. When interpreting the data, please note that compared to the other KICs presented here, EIT-UM is by far the youngest KIC.

4. Findings

4.1. Relevance

The first Strategic Agenda was written by EIT-UM already in 2019, but needed to be revised to integrate the new Horizon Europe requirements. However, EIT-UM was already conceptualised in line with the European Green Deal Priority stipulated in the Political Guidelines for the European Commission 2019-2024. Furthermore, EIT-UM is committed to contributing to the EC’s Sustainable and Smart Mobility Strategy (2021)⁴, which references the proposed European Commission targets for reducing the CO2 emissions of new cars and vans by 55% respectively 50% by 2030 and zero emissions from new cars by 2035.

EIT-UM is fully aligned with the objectives of the EU. EIT-UM activities are clearly positioned towards SDG 11 (Sustainable Cities and Communities), in particular, 3.6 (halving road deaths and injuries by 2030) and SDG 11.2 (making cities safe and sustainable). Furthermore, the New European Bauhaus Initiative (NEB) launched by the European Commission in 2021, which seeks to make the EU a leader in the circular economy, create a sustainable built environment and create inclusive, accessible spaces, is another important connecting point for EIT-UM. In 2021, a cross-KIC activity on NEB was established, in which EIT-UM also participates.

Although the focus of EIT-UM is more specific on urban mobility, including a strong consideration of urban planning, the original point of access for EIT-UM dates back to Horizon 2020 and, in particular, to the goals stipulated and funded under Societal Challenge 4 (“Smart, green and integrated transport”). This includes the notion of a resource-efficient, climate and environmentally friendly, safe and seamless European transport system for the benefit of all citizens, the economy and society, which should lead to better mobility, less congestion, more safety and security, fewer fatalities and casualties, etc.

⁴ EC (2020): Sustainable and Smart Mobility Strategy (SSMS) – putting European transport on track for the future; <https://transport.ec.europa.eu/system/files/2021-04/2021-mobility-strategy-and-action-plan.pdf>; accessed on 27 September 2022.

EIT-UM contributes to all four specific objectives of Horizon Europe, as stated in Article 4 of the Regulation⁵ and in particular to the expected Horizon Europe impacts

- “climate-neutral and environmental-friendly mobility” (No. 25) and
- “safe, seamless, smart, inclusive, resilient, climate-neutral and sustainable mobility systems” (No. 26).

Expected impact No. 25 belongs to the impact area “Industrial leadership in key and emerging technologies that work for people”, which – at highest aggregate level – falls under the key strategic R&I orientation KSO-A (“Promoting an open strategic autonomy by leading the development of key digital, enabling and emerging technologies, sectors and value chains”) as stipulated by the EC’s Strategic Plan⁶. Expected impact No. 26 belongs to the impact area “smart and sustainable transport”, which in turn falls under the key strategic R&I orientation KSO C (“Making Europe the first digitally-enabled circular, climate-neutral and sustainable economy”).

EIT-UM activities also correspond to the ERA Agenda 2022-2024⁷ through actions 10 (make EU R&I missions and partnerships key contributors to ERA), 11 (accelerate the green/digital transition of Europe’s industrial ecosystems), 14 (bring science closer to citizens) and 7 (upgrade EU guidance for a better knowledge valorisation). EIT-UM also contributes to research careers via its international academic and vocational training offers and actively supports gender mainstreaming, for instance, through its investments in gender-balanced start-ups (find more information in 6.4.1).

EIT-UM also started diligently to incorporate various technological, scientific, and socio-economic characteristics of different Member States via the establishment of Innovation Hubs and RIS Innovation Hubs, effectively building and leveraging on existing European capacities as well as tapping into a spectrum of regional and national needs and priorities (but not yet financial resources).

Overall, EIT-UM’s approach and its activities are clearly relevant to Horizon Europe. EIT-UM addresses the central strategic goals of European R&I policy and endeavours to develop a clear positioning within the framework of the FP instrument portfolio, which clearly differs from the mainstream of the Framework Programme (see Section 6.2).

⁵ Regulation (EU) 2021/695 of the European Parliament and the of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme- for Research and Innovation, laying down its rules for participation and dissemination; <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0695>; accessed on 5 October 2022.

⁶ European Commission, Directorate-General for Research and Innovation, Horizon Europe: strategic plan 2021-2024, Publications Office, 2021, <https://data.europa.eu/doi/10.2777/083753>; <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1>; accessed on 6 October 2022.

⁷ European Commission (2021). European Research Area Policy Agenda – Overview of actions for the period 2022-2024. DG Research and Innovation. November 2021. https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf; accessed on 12 June 2023.

4.1.1. Flexibility in updating Strategic Innovation Agendas

The first Strategic Agenda was written by EIT-UM already in 2019 but had to be revised to integrate the new Horizon Europe requirements and the overall change of EIT's strategic and operational policy.

"We had to make some adjustments as well as rethink some of the programmes. So that was definitely a challenge that we had to face" (interviewee)

The new version (i.e. Strategic Agenda 2021-2027), published on 16 April 2021, was developed with the whole EIT-UM core partnership. It defines the EIT Community objectives, goals and strategic priorities, and outlines how EIT Urban Mobility works towards the realisation of those objectives within all the programme areas. Furthermore, the document gives an overview of the scope of the key actions and activities. It also specifies the mode of operation, how the EIT Community engages with stakeholders on a local, national, European and global level and how they deliver on impact as well as financial sustainability within the Horizon Europe programming period. The Strategic Agenda focuses on mobility-related challenges in EIT-UM's core areas of intervention (education, innovation, business creation and additional programmes). It has a strong market and entrepreneurship orientation and a strong awareness of the need to become financially sustainable. The Strategic Agenda approved in 2021 is currently being revised due to changes in regulations that have occurred in the meantime.

EIT-UM management expects the next update in preparation for FP10. In-between, short-term adjustments are done through the business plans. In 2020, operations were based on a yearly business plan. At the request of the EIT, it was followed-up by a biennial business plan for 2021 and 2022 and a three-year business plan for 2023-2025. The longer timeframe of the business plan is perceived as a significant facilitation of planning for the management and provides medium-term planning predictability for the EIT-UM ecosystem.

4.2. Coherence

EIT-UM has been successful in aligning its activities and vision with relevant EU policy objectives (e.g., European Green Deal, 2030 Climate Target Plan, Sustainable and Smart Mobility Strategy). From the point of view of programmatic coherence of EIT-UM within Horizon Europe, this KIC occupies an important complementary position to facilitate the green and digital transition. EIT-UM's USP results from its special focus

1. on lifelong learning to provide sufficient human resources and capabilities for the further development of the urban mobility sector,
2. its emphasis on innovation projects in the higher Technology Readiness Levels (TLRs⁸),
3. its strong focus on supporting start-ups,
4. and its work on building functioning urban mobility ecosystems all over Europe, not least with a strong focus on the so-called "widening" countries of the EU.

Although there are, of course, thematic intersections with the calls in Horizon Europe, in particular Cluster 5, as well as with some other partnerships, notably Driving Urban Transition

⁸ The EIT is part of Pillar III of Horizon Europe.

(DUT), the EIT-UM approach differs from the latter in terms of the network and service orientation applied and the use of instruments. Cooperation with the cities in the Cities Mission and DUT is mostly channelled through the local innovation hubs of EIT-UM.

As a self-declared innovation community to educate and inspire mobility solutions for 21st-century cities, EIT-UM established relationships with key-stakeholders to sort out and achieve synergies. Key stakeholders and further initiatives include other KICs (especially EIT Inno Energy, EIT Climate-KIC and EIT Digital). EIT-UM is involved in communication activities, dissemination of project results and strategic exchanges with the whole EIT-KIC-Network (see also Indicator Nr. 7a Activities, BMR-Survey Data 2023 received from EC). Secondly, Horizon Europe, in particular the Cluster 5 (Climate, Energy and Mobility) under Pillar II, the other co-programmed (CCAM and 2ZERO) and co-funded (DUT) Partnerships, and the EIC (in particular the Accelerator instrument) under Pillar III, as well as the Digital Europe Programme are of utmost importance for EIT-UM. Moreover, EIT-UM explicitly understands itself as a contribution to the EU's mission of 100 climate-neutral and smart cities (see also Indicator Nr. 7a Missions, BMR-Survey Data 2023 received from EC).

Also, initiatives and networks dedicated to local authorities are of great importance, such as EUROCITIES, Polis network, ICLEI, C40 Cities, Metropolis, ERTICO – ITS Europe, European Regions Research and Innovation Network (ERRIN), and the CIVITAS Initiatives. EIT-UM further references in its Strategic Agenda (2021) the sector group on the mobility of the European Enterprise Network, the European Digital Innovation Hubs, which start their operations these days and the banking sector (e.g. EIB, EBRD and national investment banks) both from the perspective of innovative SMEs and from the local authorities' angle. In addition, EIT-UM actively uses various European tools, such as the Horizon Results Booster EU IPO and organises information sessions with EIB or EPO for its work. It also aims to establish closer synergies with ERASMUS+ (see also Indicator Nr. 7b, BMR-Survey Data 2023 received from EC). According to the BMR-Survey Data 2023 received from EC, EIT-UM does not use funds from the European Structural and Investment Funds, the Recovery and Resilience Facility, the Just Transition Fund and the Innovation Fund.

4.3. Efficiency

Despite the challenging Covid 19 pandemic in 2020 and 2021, EIT-UM has entered the operationalisation phase very quickly, which speaks for swift start-up management. The first calls were already launched in 2019, and the first projects started implementation already in 2020. The available data also show that a high mobilisation effect could be achieved through EIT-UM's public relations work, the annual flagship event and the "Mobility Learning Channel (Web TV)". The EIT KPIs also show very positive values for start-up support exercised by EIT-UM.

As of October 2022, more than 15,000 professionals have also been trained, respectively, informed by the Competence Hub, which is an impressive figure. There are several reasons for this non-achievement in the field of education and training. One reason is that by 2023 only two master programmes instead of the targeted four are operational. Thus, a call for further MA courses to broaden the network and the academic offer is launched in fall 2023. Attempts are made to mobilise more universities of applied sciences because they are supposed to work closer with the local ecosystems. However, this also requires supplementing the model of double degree programmes with a fellowship model to facilitate cooperation between 'regular' universities and universities of applied sciences. This is currently being developed.

Another reason for the non-achievement of educational objectives at this early stage of the EIT-UM activities is the focus on establishing a robust education infrastructure and the building of an internationally recognised brand associated with it. According to one interviewee, investment in the promotion of the educational offers of EIT-UM is a main strategic goal of EIT-UM's educational efforts, but there is awareness that it takes years to get the label and the brand recognised. Thus, EIT-UM kicked-off an initiative by inviting other KICs to increase traffic to the individual platforms or sites that the different KICs have in place, resulting in the EIT Campus online platform⁹.

“At the beginning we didn't really have anything to come with, so we were kind of just a piece of paper. Now we earn gradually a good position” (interviewee).

Another reason, which caused some inefficiencies during the start of EIT-UM was to understand how things worked. EIT-UM staff claimed that they suffered from the changing requirements and rules imposed by the EC on EIT and its KICs during the transition from Horizon 2020 to Horizon Europe, which coincided exactly with the founding phase of EIT-UM.

The efficiency of the EIT-UM calls can also be questioned. Although the EIT-UM call management tries to be agile towards its clients, it was stated in an interview that call management is heavy and time-consuming on the inside. EIT-UM-management perceives it as inefficient and problematic that the same Horizon Europe rules apply to grants of € 2 to 3 million also apply for grants of €35,000. This is, in fact, a concern because many calls launched by EIT-UM are relatively small-scale¹⁰, and it was mentioned that the documentation effort prescribed by the handbook rules discourages companies. To bring more efficiency into the call management system, EIT-UM attempts gradually to exploit the possibilities stipulated by Annex 5 of the Horizon Europe contract (e.g. direct and restricted awards; lump sums). EIT-UM started in 2023 also with the implementation of cascade funding, for which it also sees the need for simplification (Indicator Efficiency Progress, BMR-Survey Data 2023 received from EC). EIT-UM claims that different rules for EU programmes are currently still an issue and calls for support from the Commission to harmonise different requirements (Indicator Efficiency Progress, BMR-Survey Data 2023 received from EC).

EIT-UM grew in the first 3.5 years of its operation to almost 150 employees (including Innovation Hubs) due to a very steep funding curve. To maintain this level of employment, correspondingly high funding of several million euros will also be required in the future. This rapid increase in employees, especially in administration, was also criticised, especially as frequent staff changes also accompanied it.

In this context, it should be noted that 42% of the distributed funding between 2020 and 2022 was used for the establishment and expansion of EIT-UM's working structures, including its Innovation Hubs. This budget has been allocated not only for purely administrative purposes but also to enable productive activities to be carried out by the EIT-UM experts employed for various purposes, such as start-up consultancy or networking activities.

It was further criticised that part of the hired personnel was engaged to acquire funding from Horizon Europe and thus moved in a position to compete against their partners potentially.

⁹ <https://eit-campus.eu/#newsletter-signup>; accessed on 16 August 2023

¹⁰ Source: EIT-UM (2023), BP23-25 Calls programme, update from 10 February 2023. https://www.eiturbanmobility.eu/wp-content/uploads/2023/02/Calls_programme_2023-03_02_2023.pdf; accessed on 12 June 2023.

“So we are partially financing an organisation that is competing against us for extra EU funding ... No one can understand why we are funding an organisation that has a financial sustainability plan that comes from EU funding” (interviewee).

Understandably, the EIT-UM management sees this quite differently and argues that very selective participation in Horizon Europe calls enables EIT-UM partners to participate in the Framework Programme without having to coordinate¹¹. In addition, the EIT's financial sustainability requirements demand that the KICs also endeavour to obtain competitively acquired funds. At the same time, there is a need to ensure synergies, and the European Commission encourages collaboration between the EIT communities and pillar II by specifically referencing the EIT communities in the Horizon Europe Work Programme calls.

In summary, it seems from today's point of view appropriate that in the start-up phase of EIT-UM, a stable management and administrative system needs to be established first, which will enable the implementation of more and larger-volume activities in the future. However, the transition from the pioneering phase to an efficient and effective stabilisation phase must be completed within the next two years to implement more large-scale activities and generate broader impact.

Thus, EIT needs to closely monitor the further development of EIT-UM in terms of efficiency through the assessment of EIT-UM's business plans, annual reports, and self-assessment surveys. Its Good Governance Principles are part of the annual monitoring programme. Any concern regarding non-compliance triggers additional attention from the EIT Governing Board, which once a year carries out monitoring visits to all the KICs. Together, the EIT and EIT-UM work closely with the EC, especially in terms of strategic development. The EC has a seat and veto right in the EIT governing board where EIT-UM's business plans are reviewed.

4.4. Effectiveness

During the first three operational years of EIT-UM, the partnership focused primarily on future mobility, sustainable city logistics, mobility and energy, and active mobility. EIT-UM's activity portfolio includes a dedicated service approach that goes beyond funding for projects. This is clearly reflected in the academic and professional training offered, in EIT-UM's ecosystem development approach across Europe, the inclusion of the participating cities and the support for start-ups. Such a comprehensive service orientation is hardly found in the regular execution of Horizon Europe.

Overall, EIT-UM is on target with all of its KPIs, including both EIT and KIC-focused KPIs (see Annex C, Tables 15 and 16). According to EIT-UM's highlights report for 2022, more than 70 innovation projects were supported, and 23 solutions were launched to the market. The innovation projects usually focus on higher TRLs (6 or higher). Mainly, smaller projects are funded, many of which have an experimental character or can be regarded as pilots. They are very application-oriented and often try to integrate citizens. The EIT-UM innovation projects can be seen as complementary to the mainstream of Horizon Europe, as they actively support the transition of innovation beyond the so-called "valley of death".

¹¹ According to the Highlights Report from EIT-UM with a database from October 2022, EIT-UM was involved in only five non-EIT funded projects

EIT-UM was also able to achieve good values in its early phase in terms of "designed/tested innovations" and "marketed innovations with sales of €10,000 or more".

"For us, success is when people buy" (interviewee).

EIT-UM has been particularly effective in supporting start-ups too. As shown in Annex C, the target of 345 supported start-ups was clearly exceeded with 472 until the end of 2022¹². EIT-UM aims to provide a start-up-friendly environment including access to partners, infrastructure and finance. The countries of registration of these supported start-ups were widely spread, including several countries associated with Horizon Europe as well as third countries. More investments were also attracted for these start-ups than originally planned.

Moreover, investments were very unevenly distributed. About 50% went to start-ups in Germany¹³. The creation of new start-ups as a result of innovative projects is slightly below the target set.

Another priority of EIT-UM during the last three years was the establishment of academic education and vocational training offers within its "Academy" pillar. The KIC contributed to skills development in institutions and up- as well as re-skilling. The initial ambitious goals in the "Academy" could not be fully achieved yet - at least not in the early phase of EIT-UM also due to the Covid-19 pandemic. According to EIT-UM's highlights report 2022¹⁴, a remarkable number of 15,000 professionals were trained by the Competence Hubs, which indicates good progress towards the 2027 target of 50,000. By June 2023, 42 videos were accessible on the "Urban Mobility Explained" website¹⁵. This roughly corresponds to the goal of one new video per week since summer 2022. The number of subscribers was then 9,170. Until 19 June 2023, the number of web views was 1,261,705, which is an impressive number.¹⁶

EIT-UM currently runs two master programmes (instead of the targeted four), but a call to broaden the offer shall be launched in fall 2023. EIT-UM also organises a PhD School that focuses on an additional entrepreneurship module to bridge the gap between research and application. The course corresponds to 30 ECTS. Doctoral candidates can also apply for financial support if they want to establish a start-up. The first EIT-UM PhDs graduated in the fall of 2022. To make the work of the Academy more visible, EIT-UM also started an interdisciplinary academic journal for urban mobility.

For the time being, the educational and training offers of EIT-UM are still under development. Investments in the promotion of these educational offers are deployed, for instance, to organise a digital marketing strategy to increase access to EIT Campus¹⁷, an initiative of EIT-UM.

"There is a lot of really good education within the system, but the visibility and marketing has not been good enough" (interviewee).

¹² EIT Urban Mobility (2022b). Highlights Report 2022. The data basis was October 2022

¹³ It should however be noted, that the figures provided by EIT from its database do not harmonise with the EIT Urban Mobility highlights' report from 2022.

¹⁴ EIT Urban Mobility (2022b). Highlights Report 2022. The data basis was October 2022

¹⁵ <https://www.youtube.com/@urbanmobilityexplained/videos>; accessed on 19 June 2023.

¹⁶ According to Alessandra Pala from EIT-UM, the number of subscribers increased to 17,800 and to 3.6 mio. views in February 2024.

¹⁷ <https://eit-campus.eu/#newsletter-signup>

To facilitate the creation and expansion of R&I networks, EIT-UM placed particular emphasis on dissemination, exploitation and communication. Extra structures and instruments have been created for this purpose, such as the RAPTOR scheme, which offers a specific solution for one municipality at a low scale or the Action Impact Groups (now Horizon Lab). EIT-UM disseminates via several dissemination platforms and channels, including the webinar series 'Mobility Talks', the video blog 'I have a question for you' and the 'urban mobility explained'-channel. To achieve objective 5 of the EIT-UMs 2021-2027 Strategic Agenda, which is promoting effective policies and behavioural change, the evaluation of Deloitte and White (2023)¹⁸ recommends putting more emphasis on this objective in the coming years. This could also be strengthened by more best-practice exchanges for developing, testing and procuring innovative solutions.

Another structure was the "Factory", aiming to scale-up mobility solutions by putting them into practice in cities. It offered a marketplace for innovative solutions and created visibility for European lighthouse innovation¹⁹. By October 2022, 114 urban mobility solutions were showcased on the EIT-UM marketplace. By October 2023, this number had increased to 312²⁰. The label "Factory" ceased to exist in June 2023. Its tasks were partly incorporated into the innovation area.

Finally, EIT-UM also has a large outreach through its flagship event, "Tomorrow – Mobility World Congress", which was visited by 15,000 participants in 2021. This flagship event is held annually and offers opportunities for networking and the presentation of solutions. It is visited by companies, cities, research organisations, NGOs etc. from all over Europe and beyond.

Nevertheless, EIT-UM is far from achieving its statutory objectives after only three years of operational work. This is due firstly to the fact that structures first had to be created in the pioneering phase of EIT-UM. Secondly, these structures have also absorbed many of the available resources, meaning that at the same time, there was less funding available for more substantial calls for proposals. Third, the building of a transformative ecosystem with a high degree of mobilisation is still in full swing.

4.5. Gender mainstreaming

The gender dimension is high on the agenda at EIT-UM and is included in the R&I content. Applicants are requested to take gender issues into account in their innovation projects, which came as a shock - according to an interviewee - to some applicants. Proposal evaluators have been sensitised accordingly by EIT-UM and points are awarded for a proper integration of the gender dimension in proposals. Moreover, gender is referred to in some call topics as a dimension that needs to be explicitly addressed and researched (e.g. the 'Women in Urban Mobility'-project). However, it was also admitted that in some areas, such as logistics, gender-awareness is still very underdeveloped.

Gender is also pro-actively addressed in a number of education and training courses. To make its educational offers more inclusive, EIT-UM changed the wording and the tone of its promotion materials, but it was admitted that – although a concern of EIT-UM - the gender balance of the people interested in enrolling on EIT-UM courses is difficult to influence.

¹⁸ This is also emphasised in the evaluation of Deloitte and White, 2023. See pages 17, 62, 74

¹⁹ <https://marketplace.eiturbanmobility.eu/>; accessed on 17 October 2023.

²⁰ <https://marketplace.eiturbanmobility.eu/opportunities>; accessed on 17 October 2023

“It remains a question what we can do before the students send in their applications”
(interviewee).

EIT-UM as an organisation has more females than men employed. However, in the Management Team of EIT-UM are only seven women and 12 men²¹. In the Supervisory Board are three women and four men.²²

4.6. EU added value

The EIT-UM aims to create a clear EU-added value through cooperation between public and private actors along a strategic agenda in the field of urban mobility across Europe, structured primarily around the EIT-UM Innovation Hubs. The EIT-UM Innovation Hubs are territorially grouped and organise activities across single EU Member States. In this sense, the Innovation Hubs operate between a purely European and a purely national level. Often, the EIT-UM Innovation Hubs work together on joint initiatives. All five EIT-UM Innovation Hubs have a director and a staff of around 10 persons. They have a central role in building up ecosystems in the area of urban mobility. They care for start-ups, disseminate the innovation calls and inform cities, member states and partners about opportunities provided by EIT-UM. An interviewee from a National Contact Point of a country only peripherally involved in EIT-UM activities confirmed that the Innovation Hub well informs him about various EIT-UM activities. Every year, the Innovation Hubs focus on a certain country, either working with the established Regional Innovation Scheme (RIS) hubs or with other networks and structures from that particular country.

Through its Regional Innovation Scheme (RIS) with hubs in Croatia, Greece, Hungary, Latvia, Malta, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia and Türkiye, EIT-UM has an outreach to countries and regions that are moderate and modest innovators. RIS-activities should

- improve the innovation capacities of the local ecosystem via capacity-building and networking activities
- attract and facilitate the integration of potential new partners in the KICs and link local innovation ecosystems to pan-European innovation ecosystems
- create a bridge towards relevant RIS3s
- leverage additional private and public funding, with particular attention to ESIF.

The RIS hubs are connected to the Innovation Hubs and completely integrated into EIT-UM's activities. In 2020, EIT-UM established the first seven RIS hubs and one year later, in 2021, it expanded the RIS coverage with five new hubs. Initially 10% up to 15% of the budget is earmarked to bring the moderate and modest innovation regions and countries on board. According to an interviewee, approximately 52% of innovation funding goes to these countries, which is well above the original set target. Between 2021-2022 EIT-UM has been specifically successful with regard to its goals to deliver on business creation, having supported 315 start-ups and scale-ups (Deloitte and White, 2023, p. 52).

²¹ <https://www.eiturbanmobility.eu/the-team/>; accessed on 1 March 2023

²² <https://www.eiturbanmobility.eu/the-team/supervisory-board/>; accessed on 1 March 2023

EIT-UM also offers European-added value at the programmatic-content level. This happens firstly through the above-mentioned creation of European and transnational regional ecosystems focusing on the deployment of applicable urban mobility solutions to the market. Second, EIT-UM differs from the majority of other European programmes and initiatives in the given thematic field primarily through targeting higher TRLs has a strong focus on innovation and start-ups with the self-image of an impact venture organisation.

At the instrumental level, EIT-UM's Innovation Programme is designed to either complement or amplify activities funded under Horizon Europe (HEU). The collaborative Innovation calls, for instance, target smaller projects and consortia than usually done by HEU. The programme goes beyond launching R&D calls and also promotes activities related to market, regulatory and societal uptake and aims to strengthen synergies with other relevant initiatives. It is strongly oriented towards innovation and the actual piloting and experimentation in concrete urban spaces. By cooperating with cities, it also contributes to non-technological innovations. EIT-UM also pushes for strong open data regimes for urban mobility. However, its public realm activities implemented until the end of 2022 are clearly below the target²³. This also refers to the involvement of citizens in demonstration/pilot and living labs (see Deloitte and White 2023, p. 48).

Another clear added value of EIT-UM is its strong outreach towards start-ups and scale-ups in the given thematic field. Existing national deficits in start-up and scale-up support are addressed, and cross-border cooperation is promoted.

EIT-UM's systematic contribution to the provision of trained personnel for the mobility challenges of the future is another European added-value of EIT-UM, which is hardly covered elsewhere.

EIT-UM tries to not only work together with the European, national and regional (mostly urban) levels, but also aims to utilise the available means from these levels, including the deployment and scale-up of proven technologies. In purely financial terms, however, the financial contribution from the national or local level is still small. Thus, EIT-UM's Horizon Lab, whose initial focus was on identifying funding calls launched under Horizon Europe for submitting proposals, was encouraged to explore more national and regional opportunities too.²⁴

4.7. Additionality

The achieved financial additionality by EIT-UM, defined as the mobilisation of private and/or public (non-EIT) financial R&I contributions, is overall moderate. In 2020, 16.67% of the funding for EIT-UM's KAVA activities was financed by non-EIT funding. In 2021, the share of non-EIT funding was 12.58% and 12.69% in 2022 (see Table 3). In all three years, most non-EIT funding came from the KIC partners themselves (mainly membership fees). These amounted to around €16 Million. The receipts from the private sector or the national or regional level were almost negligible (less than €150k each).

The financial leverage can be calculated in different ways. If the sum of the co-funding acquired plus the revenues and the non-EIT financed KAVA are related to the direct EIT funding for EIT-UM, a financial leverage value of 0.27 is calculated. If the co-investments acquired by the start-ups supported by EIT-UM are also added to the total for third-party

²³ Deloitte and White (2023). Three-year interim Review of EIT Urban Mobility. Final Report. Page 28.

²⁴ As mentioned by Alessandra Palla from EIT-UM, this has recently been taken further with the Innovation Hubs, who have City Development Funding Officers who will help to explore these opportunities.

funding, the leverage effect increases to 0.65. The leverage effect becomes positive if the funds raised from the so-called KCAs (KIC Complementary Activities) are also included, which, however, only occurred as one-off effects in 2020; the financial leverage of EIT-UM then amounts to 1.10.

A summarised overview of the three key figures on the financial leverage of EIT-UM is provided in Figure 5 in Appendix B, which offers a comparison with the other EIT-KICs. This shows very large differences between the KICs, with very high leverage effects in some cases for the older KICs and comparatively significantly lower leverage effects for the newer KICs (EIT-Manufacturing and EIT-UM). The conclusion from this observation suggests that a start-up phase is necessary to achieve a higher financial leverage effect. The figures up to 2026 will be more meaningful.

4.7.1. Partnership

A central aspect of EIT-UM is to overcome geographic and sectoral fragmentation by encouraging all urban mobility players to work together and increase social inclusion and equality. The EIT-UM partnership includes core partners and project partners. Project partners were only involved in the partnership for the specific project durations, while core partners remained in the partnership.

EIT-UM states on its website that it has, in total, 300 partners from 33 countries across Europe²⁵. The partners who work along the complete value chain from vehicle and traffic technologies to urban planning, data services, energy, retail, financial services and engineering, listed on EIT-UM's website are, however, considerably fewer. They include 79 organisations, which can be broadly subsumed under the business enterprise sector, 41 cities and regions, 26 education institutions (mostly from the field of higher education), 18 research organisations (out of which some also belong to the education sector) and 5 NGOs. In order to better capture the concerns of civil society in the further development of mobility systems in the city, more NGOs should be formally included in the partner network.

The initial core partnership of EIT-UM subsumed 50 partners²⁶. The largest part of the core partners were from the field of higher and vocational education (16 partners). 15 core partners were from the industry, including prominent companies such as SKODA Auto, Siemens Industry Software and Services B.V., BMW Group, SEAT SA or Ferroviaria. Another 12 core partners were from city administration, including cities such as Hamburg, Stockholm or Istanbul, and seven were from the non-university research cluster. The diversity of relevant participants was high. Organisations from 18 countries were initially involved among the core partners, out of which 14 were from EU Member States. Most core partners came from The Netherlands and Spain (8 core partners each), followed by Germany (7). In 2022, the number of core partners dropped.

In the partner network of EIT-UM, the inclusion of cities as main stakeholders is a key issue, from which the success or failure of the initiative can be gauged. Cities are involved in almost all Innovation activities, either as a consortium partner or working closely with a commercial partner to demonstrate or pilot a solution. However, the cities' expectations at the outset were focused more on the broader impact of the activities to contribute to their own sustainable mobility goals, which can sometimes be seen as conflicting with the other EIT UM goals of financial sustainability and commercialisation of innovation, for which, in turn, high TR levels

²⁵ <https://www.eiturbanmobility.eu/our-partners/>; accessed on 16 August 2023.

²⁶ https://www.eiturbanmobility.eu/wp-content/uploads/2022/03/2022_CORE-PARTNERS-PER-COUNTRY.pdf; accessed on 6 October 2022.

are decisive. As a result, there was criticism that the KPIs were too focused on commercial success and did not reflect the transformation needs of the cities.

“I think we already knew back then that it’s unlikely that we’ll get good results with this kind of KPIs” (interviewee).

It was also stated that due to the narrow timeframes of supported projects and the small-scale nature of many funded innovations, some EIT-UM activities might be better suited for less ambitious cities. In general, the cooperation with the cities improved after both sides have tried to function as a network to build up an eco-system instead of acting as a closed funding club.

Table 10 in Annex B shows that the funding allocation to participants from different countries in EIT-UM activities is highly skewed. While participants from just a few countries profit a lot from the EIT-UM activities in financial terms (in particular Spain), many others do not. Participants from only three countries (Spain, Germany, and the Netherlands) consume more than 50% of the EIT-UM funding (funding for the Headquarters and the Innovation Hubs was already deducted)! The funds spent on the participants from the vast majority of countries do not even amount to two million per country in the period from 2020 to 2021. The extent to which such small amounts can actually contribute to the postulated urban mobility turnaround must be viewed sceptically.

On the other hand, it is striking that organisations from countries that tend to be among the weaker innovators in Europe are quite active in EIT-UM. In this respect, EIT-UM fulfils an important role in the widening agenda of the European Research Area (ERA) in line with the EIT legislation and EIT RIS. With regards to its RIS activities, EIT-UM has developed six Work Plans for (i) awareness raising and info events, (ii) supporting innovation, (iii) business creation, (iv) supporting education, (v) local community building and (vi) cross-KIC jump starter activities. Also, within these work packages, EIT-UM was able to reach most of its set targets. However, even the engagement of these organisations, which stands out positively, especially with regard to the start-ups supported by EIT-UM (see Table 13 in Annex B), is not reflected in terms of the financial resources distributed (see Table 10 in Annex B).

4.8. Directionality

EIT-UM is fully in line with the EU’s Green Transition Agenda. 100% of its resources are invested into activities linked to the Green Deal objectives (Indicator Nr. 3.1 Target, BMR-Survey Data 2023 received from EC). By August 2023, 21.8% of the EIT-UM’s partnership total partnership budget has already been invested for this purpose (Indicator Nr. 3.1 Progress, BMR-Survey Data 2023 received from EC). Around 20% of the total partnership budget is earmarked for digitisation expenditure associated with the Green Transition (Indicator Nr. 3.2 Target, BMR-Survey Data 2023 received from EC), of which 4.3% had been spent by August 2023 (Indicator Nr. 3.2 Progress, BMR-Survey Data 2023 received from EC). 10% of the overall budget is earmarked for activities to strengthen resilience in the context of the Green Transition (Indicator Nr. 3.3 Target, BMR-Survey Data 2023 received from EC), of which 2.2% had been spent by August 2023 (Indicator Nr. 3.3 Progress, BMR-Survey Data 2023 received from EC).

EIT-UM’s networking efforts and the important role of cities in the emerging innovation ecosystems, as well as the high service orientation of EIT-UM (especially for start-ups) and the systemic development of a future labour market that focuses on the challenges of urban mobility with regard to sustainable and citizen-friendly urban systems, which is otherwise not available to such an extent at EU level, are to be understood as USPs of EIT-UM that cannot

be addressed in such a way by traditional calls for proposals, neither on a purely European nor purely national level.

As regards the progress towards the strategic vision of EIT-UM, some concerns were raised by interviewees. The main criticism was that EIT-UM, instead of targeting a medium-term transformative orientation of urban mobility systems as stipulated in its Strategic Agenda, is too focused on short-term commercialisation. This is attributed to the fact that the EIT model KICs are under strong pressure to finance themselves in the long term. In addition, the EIT core KPIs are not considered suitable to reflect the longer-term, transformative goals of the Strategic Agenda.

The available quantitative data show that while EIT-UM has already launched a wide range of activities, many activities are predominantly small to medium in scale. In addition, much funding has gone into institutional development and capacity building, which has equally diverted resources away from funding activities. On the other hand, the institutional development of EIT-UM is an important and indispensable necessity to create a robust basis for faster progress in the coming years.

4.9. International positioning and visibility

The EIT-UM partner network is predominantly from the EU. A few partners are included from associated countries (Israel, Norway, Serbia and Türkiye) and international partner countries (Argentina, Mexico, Switzerland, the UK and the USA). It is worthwhile to note that among the 50 core partners of EIT-UM, only four are organisations from non-EU Member States. In fact, EIT-UM has neither a mandate nor a budget earmarked for investments into activities, tasks and work-package aimed at reaching out to create linkages and establish any collaboration with international organisations and/or entities in non-EU countries (Indicator Nr. 4, BMR-Survey Data 2023 received from EC).

However, participation of international partners in EIT-UM is possible and encouraged, but no specific thematic or functional priorities and corresponding activities are implemented. Consequently, there was hardly any funding for collaborations from countries outside the EU or associated with Horizon Europe. The only exception is the UK (see Tab. 5), but also for partners in the UK, the funding has been relatively humble (€1.6 Million.)²⁷.

Of the 467 supported start-up cases registered in the KIC database between 2021 and 2022 that could be clearly assigned to a country, seven are registered in the UK, two each in Canada and India, and one each in Switzerland, Australia, Nepal, the Russian Federation and the USA (see Tab. 11). This corresponds to about 3.4% of all start-ups supported by EIT-UM. The support for start-ups registered in the associated countries was significantly higher in 2021 and 2022. Their share was 12.6%, which is due in particular to the many supported start-ups with registration in Türkiye (n=32) and Serbia (n=15).

EIT-UM also participates in a cross-EIT initiative called “global outreach”, in which different KICs work together. They operate hubs in Silicon Valley and Israel. The former hub in China was closed down due to political reasons in 2021. The idea of the “global outreach”-initiative is to share best practices, to exchange knowledge and to establish contacts and opportunities for start-ups from these countries and the other way round.

²⁷ It has to be considered, however, that from 2021 no EIT (EU) funds could be spent for UK entities.

To sum up, EIT-UM has not developed priority towards R&I internationalisation or to serve as a hub for international cooperation, let alone to act as a global ambassador for the European R&I system. According to its statutes, EIT-UM sees itself as central to the development of a pan-European ecosystem for urban mobility. Nevertheless, EIT-UM's annual Tomorrow. Mobility World Congress in Barcelona provides a fixed point with high international visibility for the global urban mobility community. Still, the absence of partners from Asia but also Africa is regrettable, as many Asian and African cities have pronounced urban mobility problems on the one hand, and on the other hand, there are also pioneering cities in Asia that are conducting transformative experiments to reduce the challenges posed by urban mobility on a wide variety of levels.

4.10. Transparency & Openness

The lack of transparency was one of the issues for which the KICs were often criticised in the past. This has to do with the original organisation of the KICs as a supposed "closed funding shop" (interviewee). With the reorientation of the KICs in the course of the transition to Horizon Europe, based on the new EIT-Regulation, this aspect has disappeared. At the same time, this has meant that the KICs have had to reinvent themselves in part as territorial and sectoral innovation ecosystems. This has also been true for EIT-UM. Indeed, to fulfil this new role, transparency and openness are increasingly regarded as core principles for building the ecosystem. This is evidenced also by a changed terminology from

"Having a partnership to building an ecosystem" (interviewee).

A big problem at the beginning of the EIT was that the KICs acted quite differently and independently from the EIT headquarters. The subsequent strengthening of these in recent years is perceived as a good development that has led to more comparability and transparency. This also applies, among other things, to data monitoring, which is gradually being improved, although harmonisation between the EIT and Corda has not yet been fully completed, and the data are not yet made systematically available to EU member countries in the regular Corda updates. EIT-UM establishes yearly reports on its performance and impact, which are accessible to the core partners, the EIT Budapest and internal stakeholders, but not beyond. The public is addressed by yearly highlights reports, which are, for instance, by Member States perceived as glossy but not suited for monitoring. Moreover, the overview of KPIs in the EIT annual reports is incomplete and target numbers are missing for the different KICs.

Another issue was the (difficult) accessibility of calls launched by KICs. Nowadays, however, calls can be found on the Participant Portal, whereas before, one had to identify them on different websites with different log-in procedures. The evaluation processes are clearly outlined, and an independent expert observer participates in the selection panel meetings.

An interviewed KIC-NCP from a Member State confirmed that he is regularly updated about the EIT-UM activities and that the communication with EIT-UM works well. However, by opening the calls also to non-core partners, the originally high success rates have decreased, probably due to higher competition. According to an interviewee, in 2020, 95% of the participants in the innovation calls were member organisations of EIT-UM, but this dropped to around 30% in 2022. Especially new SMEs from outside the original EIT-UM partners were engaged in last year's calls.

Another concern for EU Member States was the lack of data on the financial sustainability of the different KICs, which is currently improving.

Still, however, some criticism about the lack of information regarding the portfolio of investments of EIT-UM was expressed by an EIT-UM core member.

“We don’t know where the KIC is investing and why ... if they want to decide on their own, that’s fine, but it doesn’t mean that you shouldn’t hear what the partners are considering relevant or not” (interviewee).

There was also criticism that the EIT-UM core partners are not consulted enough and are involved in the activities of EIT-UM. However, core partners are involved in the development of the business plans and strategic dialogues on priorities and can influence the work agenda through this channel. They also benefit from the matchmaking activities of EIT-UM.

In this context, one interviewee said that the change of EIT-UM from a "funding club to an ecosystem provider" was not well understood by a few partners. While EIT-UM expects that some of the original members may decide to withdraw, it also assumes that this would be kept within narrow limits. According to this interviewee, the individuals who do not only look at their claims but also engage themselves and their institutions recognise benefits.

Data evidences that there is active collaboration in EIT-UM activities between participants from different sectors (see Tab. 6). Most engaged are participants from the business enterprise sector, the cities and regions and the higher education sector.

EIT-UM is open for new partners and application for EIT-UM membership is a fully open process with clear instructions on the website. EIT-UM also runs a full-fledged portfolio of activities to reach out to involve new stakeholders and countries (Indicator Nr. 5 Measures, BMR-Survey Data 2023 received from EC).

For industrial and academic partners, two partner categories are provided. The “Gold” category costs annually €30,000. It invites members to contribute to the strategic dialogue and to join special interest groups. “Gold” members have priority access to cities and full access to matchmaking and creativity processes. They are prioritised in the actions and events offered by the Horizon Lab, and they receive discounts for exhibition spaces, tickets, etc. Currently, EIT-UM has 22 gold members²⁸.

“Silver” members have to pay €10,000 annually or – if they are NGOs and SMEs - €5,000. The club goods for them are more limited, especially regarding the inclusion in strategic dialogues. Currently, EIT-UM has 96 silver members²⁹, out of which only six are NGOs, something that should be expanded through other incentive mechanisms. 34 cities³⁰ are partnering in the “Leading Cities” scheme of EIT-UM. They must pay an annual fee of €10,000. Cities are key partners because they can articulate concrete needs and facilitate experiments and piloting. Especially for companies and NGOs that do not already operate multi-nationally, cities from their own country are also important points of contact. Unfortunately, it seems difficult to convince cities to commit to the partnership fee for EIT-UM. The lack of cities from the own country also means that national funding structures have little motivation to make additional funds available for EIT-UM. To address this, EIT-UM will need to continue its efforts in this direction.

The hurdle of membership and paying the membership fee to become a partner should not be underestimated, even though EIT-UM has a differentiated membership fee system and

²⁸ Database accessed on 17 June 2023; https://www.eiturbanmobility.eu/our-partners/?_sfm_membership=3

²⁹ Database accessed on 17 June 2023; https://www.eiturbanmobility.eu/our-partners/?_sfm_membership=3

³⁰ Database accessed on 17 June 2023; https://www.eiturbanmobility.eu/our-partners/?_sfm_membership=3

has already reduced the membership fees to keep core partners on board. This became necessary by following the new EIT regulation in the course of the Horizon Europe negotiations, which was triggered by a critical report of the European Court of Auditors and which caused the old system of KICs as a "closed funding club" (which was very attractive for its members) to be replaced by an ecosystem-oriented approach. The membership system poses especially challenges for smaller organizations and NGOs and must be qualified as a barrier to entry. On the other hand, there are also several club goods for membership.

An important contribution to increasing the transparency of EIT-UM's activities, not least its calls, is the establishment of an NCP network and the Member States Representatives Group, which is currently in process and requires more corresponding outreach and information provision effort.

4.11. Phasing-out preparedness

EIT-UM is fully aware of the requirement to become financially sustainable in the long run. In terms of the corresponding target values, EIT-UM was not fully on track in the last three years although starting from a low overall level. The Financial Sustainability (FS) coefficient reached 12% compared to the targeted 15% for 2021 and 18% for 2022.

Funding streams are differentiated from revenues, but the share of funding is still 85% of the EIT-UM's budget. It consists mostly of EIT funding and funding via European projects. Other income streams are:

- Membership fees
- Revenues through the education programmes
- Revenues from services and consultancy
- Return on Investment (RoI) from innovation projects and
- RoI from EIT-UM's start-up equity portfolio.

Table 9: Sum of revenues received by EIT-UM differentiated by type of activity 2021/2022

| KIC | Type | Revenue in € |
|---------------------------|-----------------------------|---------------------|
| EIT Urban Mobility | Education | 286 655 |
| EIT Urban Mobility | Services & Consulting | 706 544 |
| EIT Urban Mobility | Membership Fees | 4 477 737 |
| EIT Urban Mobility | Alternative Funding Sources | 267 057 |
| EIT Urban Mobility | Total | 5 737 993 |

Note: Data extracted from the database provided by the EIT members for this project.

Method: sum of column "Revenue (EUR) *" included in tables "Education", "Services & Consulting", "Membership Fees", and "Alternative Funding Sources" in the file "EIT_ALLKICS_GR 2021-2022-All Annexes.xlsx" for the KIC of interest

The revenues generated for the various activities of EIT-UM in 2021 and 2022 were still relatively modest compared to the other KICs studied, with more than 75% coming from membership fees (see Table 9).

The investments attracted by EIT-UM start-ups in 2021 and 2022 were almost €35 million. (see Tab. 8 in the section on Knowledge Valorisation).

Return on Investments (RoI) from EIT-UM's start-up equity portfolio is considered by EIT-UM management to become the most powerful stream of income in the long run. EIT-UM management expects that RoI will only materialise from 2025 onwards, mainly by bringing co-investors on board and through successful exits.

“We really want to encourage talent to found start-ups that we can later on invest in”
(interviewee).

The interviews revealed that the EIT-UM management staff has a highly entrepreneurial mindset. To support the pathway to financial sustainability EIT-UM operates a sales enablement and commercial team to mobilise external funds and to develop a financing portfolio to leverage EIT investments to upscale and replicate proven solutions to cities around the world. It also aims to establish agreements with their supported start-ups. It aims to act as a trusted advisors in return for revenues, provided that they could generate added value for these companies.

A goal of EIT-UM is not to become dependent on just one source of revenue. The orientation towards financial sustainability is, therefore, also an integral part of the educational activities supported by EIT-UM, but there is still uncertainty about how to reach financial sustainability via educational offers. Most educational revenues are from students who pay for their master's programmes. In addition, there are also considerably smaller but increasing revenues from the vocational training offers. According to one interviewee, EIT-UM is starting to filter out courses that could become financially sustainable, but for the time being, they are also offering courses which probably cannot be financed in the future. An example is the PhD course, for which sustainability will be difficult to attain and probably not possible, according to the interviewee.

It will probably take some years for the professional education and training portfolio to become financially sustainable. In order to succeed, EIT-UM works currently on establishing a strong market position with a credible label in the field of (higher) education and vocational training. As from the start, EIT-UM promoted this label also overseas, because international students are supposed to bring in more money. Half of the MS students are non-EU. The regular tuition fee for the Master's programme is €16,000 for a non-EU student and €4,000 for an EU student. EIT-UM can waive up to 40% of the tuition fees from non-EU students and up to 100% for EU students. There is, however, an understanding that these programmes are costly and that costs need to be reduced if more study places can be sold in order to achieve economies of scale.

“We need to get the revenues up and the costs down. Now it's not in a balance at all”
(interviewee).

Another source of income is from successfully acquired Framework Programme projects. Therefore, EIT-UM established the Horizon Lab (former Action and Impact Group). The idea of this Lab is to assume the role of being a coordinator in strategic Horizon projects. According to Deloitte and White (2023), EIT-UM was awarded three non-EIT-funded projects, but according to recent information from EIT-UM, the number increased to nine projects by mid-February 2024. Another reason for engaging in European projects is to become more aligned with ongoing developments and to bring its approaches and opportunities, as well as its community, into these projects. By participating as a coordinator in EU projects, EIT-UM wants to offer its core partners the opportunity to receive funding for themselves if they

participate in these consortia as consortium partners. Such projects would sometimes also enable lower TRL-level research and thus become more attractive to the partnering universities. On the other hand, EIT-UM has also been criticised because, with this approach, it partly competes against its partners for the same funding pot.

“It’s not just chasing projects for the sake of projects [...] we are not doing it to attract funding necessarily at this stage in time but to be strategically aligned and provide synergies and position ourselves” (interviewee).

Overall, the path to achieving EIT-UM's financial sustainability goals can be considered positive given its short period of activity and the difficult COVID-19 framework under which it had to operate during its own “start-up”-phase. On the other hand, EIT-UM has not yet really succeeded in tapping substantial financial contributions from non-EIT sources, which is not surprising for a young KIC like EIT-UM. EIT-UM has set-up for this purpose mechanisms through the Innovation Hubs and the City Club.

5. Conclusions

EIT-UM is centrally positioned in addressing the EU's Green Transition Agenda. Through the establishment of Innovation Hubs and RIS hubs all over Europe, this KIC is actively contributing to several cross-national ecosystems in the field of urban mobility. It is performing very well in terms of achieving the set KPIs in the first three years of its operation. Most of the KPIs have been exceeded.

EIT-UM's Strategic Agenda took up the priorities of the von der Leyen Commission³¹ and anticipated the strategic direction of Horizon Europe as well as the first Strategic Plan of Horizon Europe in several respects. These refer to the data economy, a liveable urban ecosystem, a climate-neutral and sustainable circular economy, as well as inclusive and resilient urban mobility, not least to contribute to a healthy urban population. Nothing can be said about Horizon 2020 integration, as there were no corresponding activities.

EIT-UM is also strongly aligned with the priorities of DG MOVE. The new European Urban Mobility Framework of DG MOVE outlines a common list of measures and initiatives for cities to meet the challenge of making their mobility more sustainable (e.g. by reducing greenhouse gas emissions or by improving transport and mobility to, in and around cities as well as improving the efficiency of goods and home deliveries)³². EIT-UM is also a member of the new European Commission's expert group on urban mobility and has an MoU for collaboration with the International Association of Public Transport. Overall, EIT-UM is coherently positioned in the European portfolio of R&I interventions related to urban mobility (e.g. the Smart City Mission or the Driving Urban Mobility partnership) and has some USPs that the other interventions address less, such as the focus on education and training of human resources to master the transformative challenges cities face in terms of urban mobility. From a thematic point of view, EIT-UM also offers alternative perspectives and focal points that complement or expand Horizon Europe's activities without losing sight of the direction of the overall objectives of the Strategic Plan.

³¹ Political Guidelines for the European Commission 2019-2024; https://ec.europa.eu/info/strategy/priorities-2019-2024_en; accessed on 5 October 2022

³² European Commission (2021). The New EU Urban Mobility Framework. Brussels, 14.12.2021, COM(2021) 811 final, https://transport.ec.europa.eu/system/files/2021-12/com_2021_811_the-new-eu-urban-mobility.pdf; accessed on 21 December 2022

Despite adverse circumstances (COVID-19 pandemic in 2020 and 2021), EIT-UM has quickly got off the ground and has already published its first calls in the second half of 2020. Several of the planned activities stipulated by the EIT-UM's business plan are currently being rolled out. The number of KAVA increased remarkably from 2021 to 2022. However, there are not enough outcomes yet to make a reliable assessment of its overall efficiency at this stage. For instance, we could only identify 13 papers referencing EIT-UM in the course of our bibliometric analysis executed in 2022. However, this low number is insufficient for any meaningful bibliometric analysis.

In its very first years of operation, EIT-UM has been particularly effective in (i) supporting start-ups, (ii) its educational activities (especially in the direction of professional qualification) and (iii) knowledge exchange (e.g. through the annual 'Tomorrow. Mobility World Congress', which attracts 15,000 and more participants). The first projects contributing to new processes and products, which - next to companies – also involved higher education and research organisations, cities, also citizens, among others in living labs, could take place in concrete urban spaces. More than 300 market-ready mobility solutions by innovative entities are already available on the digital platform.

A particular European added value of EIT-UM is the broad project portfolio offered, which is centred on the so-called knowledge triangle (education – research – utilisation). Firstly, the focus on training should be emphasised, which is not limited to academic training but also offers vocational training in the mobility sector. Secondly, the innovation projects supported by EIT-UM through various call formats are alternatives to the large European calls in Horizon Europe for collaborative projects. They are smaller, targeting higher TRLs, and provide opportunities for experimentation. Thirdly, the strong service orientation of EIT-UM to support start-ups, which in Horizon Europe is otherwise only pursued by the EIC, albeit with different means, should be highlighted. While the EIC focuses on large injections of funds for breakthrough innovation and lower TRL solutions, EIT supports high-TRL, ready-to-deploy businesses through investments and ecosystem support (networking, marketing, partnerships and facilitation of collaboration – see "Growth Lab"). All these - and more - activities and results are shared across borders, for example, within the 'City Club' to disseminate knowledge and leverage implementation and scale-up.

It can also be noted that the expansion of the EIT-UM network is progressing rapidly. More partners from more countries are involved each year. As far as the core partners are concerned, however, it must be noted that many come from only three countries, which could be structurally disadvantageous for the widening countries. At the same time, however, it should be noted that these are actively approached and integrated into the activities of EIT-UM.

The international dimension beyond the EU of EIT-UM is quite limited. On the positive side, structures have been created that target the EU Member States and countries associated with HEU with weaker innovation systems in place.

Regarding transparency and openness, the lessons learned from the past (from other KICs) are being implemented step by step. Both aspects have now been recognised as central to the development of vibrant transnational ecosystems. EIT-UM is open to new partners and partnerships and has clear procedures for widening its partnership base. Although not central to the knowledge triangle on which the KIC model is based, the involvement of NGOs is relatively poor, which is probably due to the membership fee payment construct. EIT-UM's calls for proposals are increasingly noticed and used by non-core partners.

Financially, according to its plan, EIT-UM is very dependent on EIT funding. Only 13% of KAVA funding in the last two years came from non-EIT funding. On the other hand, the goal of financial sustainability at EIT-UM is deeply rooted in the minds of the actors involved. Most income is expected in the future from Returns on Investments in start-ups, e.g. through successful exits. But in order not to become dependent on only one or two sources of income, different sources of income are being developed. On the other hand, EIT-UM was also criticised for its pronounced commercialisation approach, which - according to the criticism - pursues short-term goals but does not provide sufficient resources and implementation possibilities for large transformative projects in the field of urban mobility.

6. Lessons Learned & Recommendations

Moving from the start-up phase to the consolidation phase

Many resources have gone into building the organisation in the first three years. The rapid increase in employees, especially in administration, was also criticised, as frequent staff changes accompanied it. Although it is understandably necessary first to establish robust processes with sufficient capacity, the change from the pioneering phase to the organisational stability phase should be finalised soon to ensure that more resources are put into more substantial activities of EIT-UM to the benefit of the established ecosystems.

The green transition is a change agenda, too.

EIT-UM's portfolio of activities and its orientation are clearly focused on supporting the EU's Green Transition in the urban mobility sector. This focus is clearly stated in EIT-UM's Strategic Innovation Agenda and work programmes. The thematic and instrumental orientation of EIT-UM is coherent with other initiatives at the European and national level. Many small steps have been taken to support new technologies, services and processes. Some are about to be launched on the market. Although the mandate of EIT and KICs is to bring innovation to the market, EIT-UM is partly criticised for its pronounced commercialisation approach, which - according to the criticism - pursues short-term goals but does not provide sufficient resources and implementation possibilities for large transformative projects in the field of urban mobility. EIT-UM data also showed that funding per participation is quite low, which strengthens the assumption that mainly smaller and/or shorter projects are supported. In addition, EIT-UM has a proven orientation towards higher TRL projects.

However, to support the transformative change element of the green transition towards sustainability, broader concepts and broader collaborative approaches are also needed. This aspiration cannot be achieved by EIT-UM solely through isolated EU project participation, which, moreover, must first be acquired and won. We, therefore, recommend - in consultation and cooperation with ambitious cities - to develop new, broader and longer-term formats with higher funding amounts that can support the transformation of urban mobility systems more comprehensively and radically. For this purpose, also jointly operated innovation procurement systems should be reflected. Such approaches require more money, more commitment and more risk-taking, even though this may seem counterproductive to the more short-term commercial goals currently pursued by EIT-UM with mostly incremental innovation projects. Evidently, this also calls for a review of the EIT-UM's KPIs.

Quickly counteract funding imbalances.

Although many partners from many countries all over Europe are engaged in EIT-UM KAVA, there is a strong funding bias in favour of only three countries (Spain, Germany and the

Netherlands). In order not to create further imbalance, more funding should quickly flow into excellent activities that also benefit organisations from other countries. This would also help to bring more dynamism into the various transnational urban mobility ecosystems that the EIT-UM Innovation Hubs and RIS Hubs are building. In that sense, further efforts by the hubs and the Regional Innovation Scheme are needed to expand outreach and inclusion.

Create an EIT-UM education and training brand with a broader study offer.

EIT-UM has not yet achieved its target in the field of (higher) education and vocational training, although it has made considerable efforts and progress. EIT-UM's current approaches to expanding service provision, both in the academic and professional spheres, are important and necessary. However, short-term success, especially from a financial sustainability perspective, is difficult to achieve. Therefore, it is important to create excellent branding for EIT-UM's education and training offers in the longer term. Both the brand and the enlarged training and education offer should also be promoted outside Europe to attract both students and companies with training needs from abroad. Therefore, it is particularly important in the short and medium term to expand the education and training offered structurally and in terms of content also by adding further training partners and to stabilise it at a high level.

Better communicate the idea of EIT-UM's Horizon Lab.

The idea of EIT-UM's Horizon Lab is to assume the role of being a coordinator in strategic Horizon projects to acquire funding, become more aligned with ongoing developments and bring in its opportunities, added-value and interested partners. Since HEU coordination is not very popular anyway, especially among smaller organisations, it is, in principle, an attractive offer for EIT-UM partners to participate in European projects coordinated by EIT-UM. On the other hand, EIT-UM partners who are regularly active in the European Research Framework Programme have also expressed concerns because they perceive EIT-UM as a competitor, supported on top of that by their membership fees. This conflict of interest cannot be dismissed, which is why we recommend firstly establishing clear rules under which conditions EIT-UM itself can and should become active in HEU. Secondly, it is recommended to communicate the benefits of EIT-UM as coordinator for the network partners well.

More inclusion of cities and expansion of the city network

A key aspect of EIT-UM is to overcome geographical and sectoral fragmentation by encouraging all urban mobility actors to work together. In the EIT-UM partner network, the involvement of cities is a key issue by which the success or failure of the initiative can be measured. However, cooperation with cities has not always been smooth. The reduction of membership fees was the first important step to attracting new city partners. These efforts should be continued because it is very important for companies and NGOs from individual EU states that also cities from their own countries are available and committed to acting as potential test and pilot arenas. Consideration should also be given to embarking on major transformation projects with the most ambitious cities.

Include more citizens and bring more NGOs on board

Although the EIT-UM partner network is continuously growing, which is very encouraging, the formal involvement of NGOs is still low. To increase this, additional incentive mechanisms should be designed to take greater account of organisations with civil society concerns in terms of mobility development in cities. Furthermore, the appropriateness of the membership fee for NGOs should be reviewed. In the future, significantly more efforts should be made or

promoted to increase the public realm of EIT-UM in order to achieve the set targets. This could be done, for example, by making greater use of living labs or citizen science projects.

Expanding international participation

EIT-UM put a lot of energy into the development of its Innovation Hubs and the RIS Hubs to build vibrant trans-European urban mobility ecosystems that span the entire Knowledge Triangle. At the same time, apart from a few countries associated with HEU, the international orientation beyond the EU with corresponding activities is noticeably underdeveloped. It is therefore recommended to increasingly reach out to Asian, African as well as (South) American stakeholders (e.g. cities) in the mid-term future beyond the annual 'Tomorrow. Mobility World Congress. Activities should be implemented to facilitate market access of European companies and knowledge providers to these overseas' markets.

Keeping the focus on financial sustainability

EIT-UM is not yet fully on a path towards financial sustainability. In 2020, for instance, only 16.67% of the funding for EIT-UM's KAVA activities was financed by non-EIT funding and in 2021 and 2022, the share of non-EIT funding was even lower. In any case, a high awareness of the need for FS is noticeable among the management. As a first step, the transition from the build-up phase to the stability phase should be completed quickly to carry out more activities and broaden the income from different sources. Close monitoring is necessary for this. It is also important to look at whether and how the expected RoI, which is low in the period under scrutiny, will materialise in the next three years. If there is a setback here, it will be difficult to develop alternative sources of income that have a corresponding potential to compensate. Thus, EIT-UM should further strengthen its asset diversification and increase its innovation project portfolio to generate further revenue (see also Deloitte and White, 2023). Also, the set target for co-funding rates should be more strongly enforced.

Simplification

Although the EIT-UM call management tries to be agile towards its clients, it was stated that call management is heavy and time-consuming on the inside. EIT UM management perceives it as inefficient and problematic that the same heavy documentation and reporting rules that apply to large grants also apply to very small grants. This is discouraging for participants, especially companies. Therefore, the existing framework for simplification stipulated by Annex 5 of the Horizon Europe contract should be further deployed and developed.

7. Sources

Deloitte and White (2023). Three-year Interim Review of EIT Urban Mobility. Final Report. October 2023.

EIT Urban Mobility (2021). EIT Urban Mobility. Strategic Agenda 2021-2027. 29 March 2021. https://eit.europa.eu/sites/default/files/210329_sa_eit-um.pdf; accessed on 20 June 2023.

EIT Urban Mobility (2021a). Request for Proposals. Production of 4 E-Learning Courses (3 Short Free Online Courses and 1 MOOC) on making cities more healthy, attractive and sustainable. Barcelona, 11 June 2021; <https://www.eiturbanmobility.eu/wp-content/uploads/2021/06/Production-of-4-E-Learning-Courses-3-Short-Free-Online-Courses-and-1-MOOC-on-making-cities-more-healthy-attractive-and-sustainable.pdf>; accessed on 9 September 2022.

EIT Urban Mobility (2021b). Business Plan 2021-2022. City Raptor – Call for Proposals. Barcelona, 14 December 2021. https://www.eiturbanmobility.eu/wp-content/uploads/2021/12/1.-EIT-UM_BP2022-Raptor_FINAL-1.pdf; accessed on 9 September 2022

EIT Urban Mobility (2021c). Business Plan 2021-2022. Call Manual Factory #ChallengeMyCity. Barcelona, 29 November 2021. https://www.eiturbanmobility.eu/wp-content/uploads/2021/12/BP2022-Call-Manual_Factory_ChallengeMyCity-Amendment-1.pdf; accessed on 9 September 2022

EIT Urban Mobility (2021d). Consolidated Annual Activity Report. Financial year: 2020. June 9, 2021. https://eit.europa.eu/sites/default/files/gb_decisions_and_eit_caar_2020.pdf.pdf; accessed on 17 June 2023.

EIT Urban Mobility (2022). Highlights Report 2022. The data basis was October 2022

EIT Urban Mobility (2022b). Consolidated Annual Activity Report. Financial year: 2021. June 21, 2022. https://eit.europa.eu/sites/default/files/2022-24_20220621_gb72-24_eit_caar_2021.pdf; accessed on 17 June 2023

EIT Urban Mobility (2023). BP23-25 Calls programme, update from 10 February 2023. https://www.eiturbanmobility.eu/wp-content/uploads/2023/02/Calls_programme_2023-03_02_2023.pdf; accessed on 12 June 2023.

European Commission (2020): Sustainable and Smart Mobility Strategy (SSMS) – putting European transport on track for the future; <https://transport.ec.europa.eu/system/files/2021-04/2021-mobility-strategy-and-action-plan.pdf>; accessed on 27 September 2022.

European Commission (2021). Horizon Europe: strategic plan 2021-2024. European Commission, Directorate-General for Research and Innovation, Publications Office, 2021, <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1>; accessed on 6 October 2022.

European Commission (2021). European Research Area Policy Agenda – Overview of actions for the period 2022-2024. DG Research and Innovation. November 2021. https://research-and-innovation.ec.europa.eu/system/files/2021-11/ec_rtd_era-policy-agenda-2021.pdf; accessed on 12 June 2023

European Commission (2021). The New EU Urban Mobility Framework. Brussels, 14.12.2021, COM (2021) 811 final, https://transport.ec.europa.eu/system/files/2021-12/com_2021_811_the-new-eu-urban-mobility.pdf; accessed on 21 December 2022

European Union (2021): Regulation (EU) 2021/695 of the European Parliament and the of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme- for Research and Innovation, laying down its rules for participation and dissemination; <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0695>; accessed on 5 October 2022.

[1] Political Guidelines for the European Commission 2019-2024; https://ec.europa.eu/info/strategy/priorities-2019-2024_en; accessed on 5 October 2022.

[3] https://www.eiturbanmobility.eu/wp-content/uploads/2022/03/2022_CORE-PARTNERS-PER-COUNTRY.pdf; accessed on 6 October 2022.

[4] Information taken from the EIT EU presentation: <https://www.ffg.at/sites/default/files/EIT%20Urban%20Mobility-FFG.pdf>; accessed on 9 September 2022.

[5] EIT Urban Mobility (2021e). Request for Proposals. Production of 4 E-Learning Courses (3 Short Free Online Courses and 1 MOOC) on making cities more healthy, attractive and sustainable. Barcelona, 11 June 2021; <https://www.eiturbanmobility.eu/wp-content/uploads/2021/06/Production-of-4-E-Learning-Courses-3-Short-Free-Online-Courses-and-1-MOOC-on-making-cities-more-healthy-attractive-and-sustainable.pdf>; accessed on 9 September 2022.

[6] https://www.eiturbanmobility.eu/our-activities/?_sft_project_category=covid-19-2020&_sft_project_year=2020; accessed on 4 October 2022.

[7] EIT Urban Mobility (2021b). Business Plan 2021-2022. City Raptor – Call for Proposals. Barcelona, 14 December 2021. https://www.eiturbanmobility.eu/wp-content/uploads/2021/12/1.-EIT-UM_BP2022-Raptor_FINAL-1.pdf; accessed on 9 September 2022.

[8] EIT Urban Mobility (2021c). Business Plan 2021-2022. Call Manual Factory #ChallengeMyCity. Barcelona, 29 November 2021. https://www.eiturbanmobility.eu/wp-content/uploads/2021/12/BP2022-Call-Manual_Factory_ChallengeMyCity-Amendment-1.pdf; accessed on 9 September 2022.

[9] EC (2020): Sustainable and Smart Mobility Strategy (SSMS) – putting European transport on track for the future; <https://transport.ec.europa.eu/system/files/2021-04/2021-mobility-strategy-and-action-plan.pdf>; accessed on 27 September 2022.

[10] Regulation (EU) 2021/695 of the European Parliament and the of the Council of 28 April 2021 establishing Horizon Europe – the Framework Programme- for Research and Innovation, laying down its rules for participation and dissemination; <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32021R0695>; accessed on 5 October 2022.

[11] European Commission, Directorate-General for Research and Innovation, Horizon Europe: strategic plan 2021-2024, Publications Office, 2021, <https://data.europa.eu/doi/10.2777/083753>; <https://data.europa.eu/doi/10.2777/083753>; <https://op.europa.eu/en/web/eu-law-and-publications/publication-detail/-/publication/3c6ffd74-8ac3-11eb-b85c-01aa75ed71a1>; accessed on 6 October 2022.

8. Appendix

8.1. Supplementary evidence: Background to the initiative

8.1.1. Governance

Since 2019, EIT KIC Urban Mobility (EIT-UM) is an initiative of the European Institute of Innovation and Technology (EIT). As institutionalised partnership, EIT-UM is planned to cover the period from 1 January 2019 until December 2026. Subject to a positive 7-years comprehensive assessment the agreement may be extended for another 7-year period. On 19 November 2019, the Inauguration event of EIT-UM took place as part of the Smart City Expo World Congress Barcelona 2019, Spain (EIT 2020). The co-funding by EIT for EIT-UM in the period 2020-2026 is up to €353 million (KIC-UM, 2021)³³. The funding framework is Horizon Europe (HEU), in particular Pillar III “Innovative Europe”, with a special provision for the European Institute of Technology (EIT) to bring key actors around a common goal for nurturing innovation together.

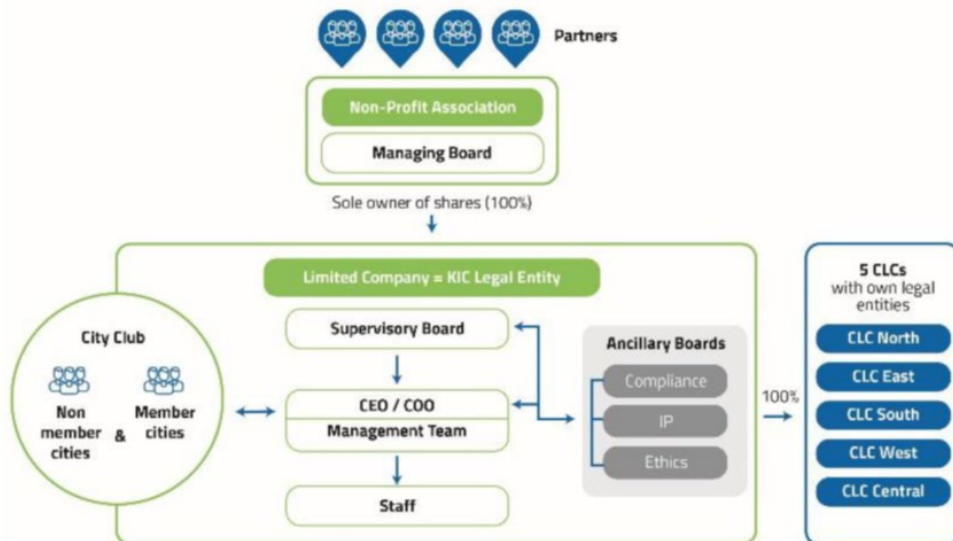


Figure 1: Overall legal structure of EIT Urban Mobility

Source: EIT Urban Mobility, 2021, p. 28

The governance structure of EIT-UM is based on the experience of existing EIT Innovation Communities as shown in the figure above. IT-UM consists of two legal entities, an association and a limited liability company (i.e. the KIC Legal Entity), which was set up by the

³³ EIT-UM just started its operations in 2019. Thus, the start-up budget from EIT for the EIT-UM was just €4m in 2019 (budget provided through the Financial Framework Partnership Agreement).

association in 2020 and in which the association is the sole shareholder. Both entities operate under Spanish Law. The EIT-UM limited company is the operational body to make the KIC financially sustainable and to pursue business activities once the funding is phased out. The governing bodies of the association are the General Assembly and the Managing Board.

The EIT-UM limited company encompasses the Supervisory Board as its main governing body, and the Management Team as its main executive body in charge of day-to-day operations (see Figure 1). The Supervisory Board, whose members are elected by the General Assembly of the association, consists of six persons, who have diverse professional backgrounds including one representative from the participating cities, one from industry and one from academia. Originally staffed by only one woman, the Board now consists of three women and three men³⁴.

Three ancillary boards staffed by experts advise the Supervisory Board and the CEO on issues, such as ethics, privacy and social implications; compliance, audit and legal affairs; and intellectual property.

The Management Team (MT), which is led by a CEO and a CFO consist of 19 persons in total³⁵. First, it comprises the main functional areas of the EIT-UM such as education, innovation, start-ups. Furthermore, the MT includes officers responsible for regions and cities, and corporate functions such as HR, IT, Finances and legal services. The directors of the five Innovation Hubs/co-location centres (CLC) are part of the MT too.

The association and the KIC Legal Entity are both located in Barcelona. The five Innovation Hubs (formerly called CLCs), which are fully owned by EIT-UM are set up in Munich (Germany), Amsterdam (The Netherlands), Prague (Czech Republic), Copenhagen (Denmark) and Barcelona (Spain) to facilitate implementation of the Strategic Agenda and annual Business Plans³⁶. These five Innovation Hubs (IH) cover different geographic areas (IH Central, IH East, IH North, IH South and IH West). Their classification is logical, although not comprehensible in all points. They report directly to and are monitored by the KIC Legal Entity. Their task is to reach out to all over Europe and create a vibrant innovation ecosystem. Collaboration between the Innovation Hubs is enforced by the general rule that innovation projects need to involve partners from at least two Innovation Hubs.

EIT-UM differentiates between gold partners, silver partners and leading cities. They differ in terms of the fees to pay and in the access to club goods provided by EIT-UM (see further details in Deloitte and White, 2023, p. 80f). All partners are affiliated to the five Innovation Hubs and RIS Hubs, which organise meetings and events for partners and external audiences with the objective to increase awareness about EIT Urban Mobility, its activities and the innovative solutions proposed by the supported projects and start-ups. The RIS Hubs reach out to those countries and regions classified as emerging or moderate innovators. In contrast to network partners from non-RIS regions, these organisations have access to EIT-RIS subgrants.

³⁴ <https://www.eiturbanmobility.eu/the-team/supervisory-board/>; accessed on 11 October 2023

³⁵ <https://www.eiturbanmobility.eu/the-team/>; accessed on 11 October 2023

³⁶ <https://www.eiturbanmobility.eu/our-hubs/>; accessed on 4 October 2023

8.1.2. Intervention logic of the partnership

8.1.2.1. Objectives, activities and intended results

As institutionalised partnership, which just started its operation with the launching of Horizon Europe, the objectives of the partnership are relevant regarding the challenges and needs addressed by Horizon Europe. Problem areas addressed by the EIT-UM include the massive GHG emission produced by transport, the massive allocation of public space to mobility, a high share of road accidents in cities, and time and money losses caused by congested transportation infrastructures. This is to be countered with efforts in the areas of multimodal transport systems, green and efficient city logistics, healthy and secure mobility systems, a green and human-friendly urban environment and a sustainable urban mobility transformation that also raises the competitiveness of Europe's industry.

The objective of EIT Urban Mobility's industry and university partners is to demonstrate how new technologies can work to solve real problems in real cities by transporting people, freight and waste in smarter ways, thus creating more liveable urban spaces. A strong focus is on decarbonisation and making Europe's economy more competitive. To create impact in these three broad areas, EIT-UM developed a Theory of Change approach.

The overall vision of EIT-UM is to

- improve quality of life in cities;
- mitigate and adapt to climate change;
- create jobs and strengthen the European urban mobility sector.

The five key strategic objectives of EIT-UM are to

- create liveable urban spaces
- close the knowledge gap between actors of the mobility ecosystem
- deploy green, safe, inclusive mobility solutions for people and goods
- accelerate market opportunities for businesses
- promote effective policies and behavioural change.

On the one hand, these five central objectives correspond to the Strategic Plan for Horizon Europe; on the other hand, they also offer alternative perspectives and focal points that complement or expand Horizon Europe's activities without losing sight of the direction of the overall objectives of the Strategic Plan.

8.1.2.2. Main expected outcomes of the partnership

To achieve these five key strategic objectives, EIT-UM undertakes interventions contributing to five main urban mobility impact goals (EIT-UM, 2021), which are

- I. Strengthening a multimodal transport system connecting people to jobs, education, and leisure, and expanding equitable access to mobility
- II. Expanding clean and efficient city logistics for goods deliveries for business and people,
- III. Enhancing a mobility system that protects and fosters people's health and wellbeing
- IV. Supporting a green and human-friendly urban environment, and inclusive design principles
- V. Enabling Europe's urban mobility sector to lead sustainable urban mobility transformation.
- VI. Figure 2 shows how change towards sustainable urban mobility for liveable urban space can be accelerated according to the Theory of Change of EIT-UM by delivering on five impact goals, which relate to the above mentioned five key strategic objectives and by contributing to the overall vision of EIT-UM.

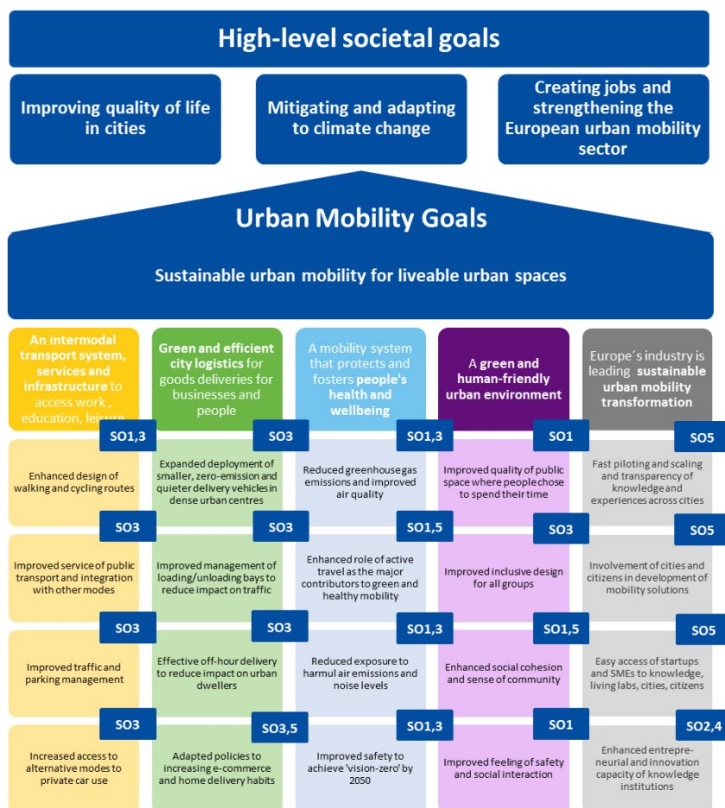


Figure 2: EIT Urban Mobility, 2021, p. 28; Note: SO = Strategic Objective

EIT-UM developed for each of its five key Strategic Objectives a series of outcomes to be achieved (see EIT Urban Mobility Strategic Agenda 2021-2027). These are for

SO 1: Create liveable urban spaces

- Improve the quality of public space design and public infrastructure to encourage active modes and enhance the use of other alternative modes to motorised individual traffic. Introduce more green and blue elements to address climate emergency. Create the conditions through projects for public space to improve social inclusion and community cohesion.
- Repurposing traffic road space to public places, which encourage healthy and clean mobility and new flexible uses that could benefit urban liveability, the local economy and the environment. Improve the quality of public space for healthy lifestyles and mobility habits, and enhance accessibility for all. Develop new forms and flexible models of urban road space use
- A modal shift to clean and healthy mobility alternatives to motorised transport. Reduce emissions from urban logistic operations by introducing new technologies and cleaner solutions.

SO 2: Close the knowledge gap

- Creating new competencies that match future needs for the mobility sector including data management, software development, new transport fuels and modes of transport, innovation and entrepreneurship.
- Creating new competencies that match future needs and creating new solutions that can be implemented on the ground
- Creating new competencies that match future needs for the mobility sector and respond to city challenges

SO 3: Deploy green, safe, inclusive mobility solutions for people and goods

- Delivering on the impact of reducing GHG emissions and creating liveable urban areas through implementation and scaling of solutions
- Moving away from investments and incentives benefitting individual motorised transport towards an increased share of public-private investments and incentives for sustainable urban mobility measures and services.
- Designing and testing new innovations that support the paradigmatic shift away from car-dependent urban mobility to people-centred urban accessibility.

SO 4: Accelerate market opportunities

- Creating marketed innovations that can be implemented enables the longer term and economic sustainability of solutions, which delivers on impact.
- Supporting new market opportunities developed and newly emerging players in the urban mobility industry and ecosystem.

SO 5: Promote effective policies and behavioural change

- Increased citizen involvement and level of active participation in decision making and co-creation of urban mobility solutions
- Mode share is a commonly used indicator that measures the impact of a city's policies on travel behaviour. As a result of continued investment in sustainable mobility, the KIC will contribute to increase the mode share of walking, cycling, public transport use combined and reduce individual motorised transport.

As shown in Figure 3, EIT Urban Mobility (EIT-UM) addresses with its five key strategic objectives eight societal and urban mobility challenges:

Challenge 1 (C1): Achieving sustainable urban growth

Challenge 2 (C2): Decongesting our transport networks

Challenge 3 (C3): Growing interdisciplinary talent

Challenge 4 (C4): Eco-efficient and safe transport for people and goods, including waste

Challenge 5 (C5): Data exploitation

Challenge 6 (C6): Boosting the competitiveness of the mobility industry

Challenge 7 (C7): Shaping the framework for regulatory and behavioural change

Challenge 8 (C8): Urban governance

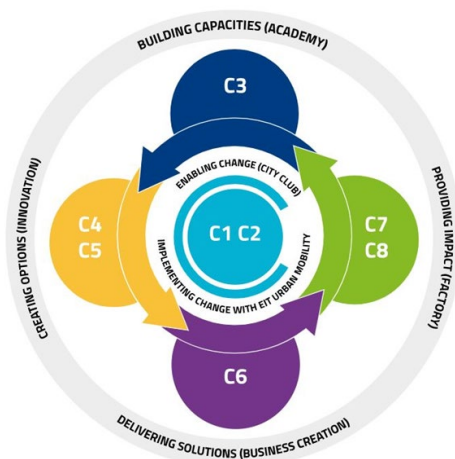


Figure 3: EIT KIC Urban Mobility's Challenges and Approaches

Source: <https://eit.europa.eu/our-communities/eit-urban-mobility>

8.1.2.3. Project portfolio characteristics

The project portfolio is structured around five specific intervention areas, namely the (i) “City Club”, (ii) “Academy”, (iii) Innovation, (iv) Business Creation and (v) “Factory”.

- i. The City Club is a platform for cities for collaborating, sharing best practice, upscaling ideas and putting them to work. Every year the City Club produces a list of key challenges facing cities, which can then be tackled by innovation projects, education and business creation activities. The partnering cities act as test beds for pilots and living labs to enhance innovation. The City Club also aims to encourage citizen engagement and networking opportunities.
- ii. The Academy supports lifelong learning and aims to train the next generation of urban mobility practitioners in a challenge-based way across disciplines and sectors. This is done in course of a Master School, a Doctoral Training Network, a Competence Hub, and capacity building activities. The Master School aims to train 500 graduates per year in partnership with 10 universities (double degrees and an EIT Label Certificate). It started in 2020 with four universities and two programmes. A scholarship programme is available. In the Doctoral Training Network, 50 doctoral students per year should be trained. The programme provides urban mobility PhD candidates with a platform for exchange and feedback on their individual research as well as networking opportunities with practitioners and senior researchers, including a four- to six-month international research placement. Furthermore, a Competence Hub offers on- and offline courses in urban mobility for professionals and aims to train 50,000 people per year and to reach a total of 500,000 people per year through its online offers, including custom-made courses for organisations. The competence Hub targets to publish one video weekly, 25+ short free online courses (SFOCs), 10+ Massive Open Only Courses (MOOCs) and 5+ face-to-face courses. EIT-UM launched a first very hasty call for proposals for 3 SFOCS and 1 MOOC in June 2021³⁷ to initiate a tack-off of these tasks.
- iii. The Innovation Programme aims to resolve urban mobility challenges in response to an annual call for collaborative proposals. 250 urban mobility challenges identified by cities have been clustered in nine challenge areas (Active Mobility, Intermodality, Mobility infrastructure, Mobility for all, Pollution reduction, Sustainable city logistics, Creating public realm, Future mobility, Mobility and energy). In 2020, a special Covid-19-call was launched supporting 11 projects³⁸. The Innovation Programme, which is understood to complement Horizon Europe, differentiates the following TRL layers:
 - a. Special Interest Groups dealing with Blue Sky thinking
 - b. The former Action Impact Groups (AIG), which is now called “Horizon Lab”³⁹ is supporting partners and cutting-edge researchers and innovators in identifying, applying for, and securing external funding for Urban Mobility projects supporting

³⁷ EIT Urban Mobility (2021a). Request for Proposals. Production of 4 E-Learning Courses (3 Short Free Online Courses and 1 MOOC) on making cities more healthy, attractive and sustainable. Barcelona, 11 June 2021; <https://www.eiturbanmobility.eu/wp-content/uploads/2021/06/Production-of-4-E-Learning-Courses-3-Short-Free-Online-Courses-and-1-MOOC-on-making-cities-more-healthy-attractive-and-sustainable.pdf>; accessed on 9 September 2022

³⁸ https://www.eiturbanmobility.eu/our-activities/?_sft_project_category=covid-19-2020&_sft_project_year=2020; accessed on 4 October 2022

³⁹ <https://www.eiturbanmobility.eu/horizon-lab/>; accessed on 26 July 2023.

pre-TRL6 innovation and research. The Innovation Programme's Exploitation Forum supports knowledge transfer towards application.

- c. Innovation calls targeting high TRLs (6+) and demonstrations close to the market TRLs. These calls encourage projects with 1 to 2 years duration with medium-sized consortia and budget. Support beyond 24-months is available via Factory and Business Creation to ensure fluid handover and scaling of completed projects (see below).
 - d. The Rapid Application for Transport (RAPTOR) scheme provides small budgets for individuals, small teams, start-ups and SMEs to demonstrate fast niche innovations over a 4-month period with support from the respective city/town/neighbourhood. A first RAPTOR pilot was developed in 2020, which helped four cities/towns in identifying niche mobility issues with defined parameters and clear success criteria. Once these niche city mobility challenges were defined, a competition was launched for local innovators and start-ups to propose solutions. Another RAPTOR call for proposals was launched with a deadline in February 2022⁴⁰ to replicate the initial pilot programme. The projects are not funded by the cities, but cities provide testbeds and conditions for implementation.
- iv. The Business Creation facility supports start-ups or provides financial resources for early business creation. This is done, firstly, via accelerator programmes, which focus on coaching, mentoring, matchmaking and access to funding and living labs. Secondly, scale-up hubs should be piloted with cities and corporates. Thirdly, small scale investment pilots and support for accessing existing investment opportunities are offered.
- v. The Factory finally aims to scale-up mobility solutions by putting them into practice in cities. It centres on a marketplace for innovative solutions and creating visibility for European lighthouse innovation. To push and accompany innovators further into the early stages of market uptake, and simultaneously help cities address their sustainability challenges in mobility, a call was launched end of 2021 (so called #ChallengeMyCity Call). The target cities were Toulouse and Milan. The earmarked EIT EU budgets were each €60,000 for challenge A and B and another €30,000 for challenge C⁴¹. These pilots are administratively supported by the cities.

A first assessment how these activities were implemented and what effect they had, is given in the next chapter.

⁴⁰ EIT Urban Mobility (2021b). Business Plan 2021-2022. City Raptor – Call for Proposals. Barcelona, 14 December 2021. https://www.eiturbanmobility.eu/wp-content/uploads/2021/12/1.-EIT-UM_BP2022-Raptor_FINAL-1.pdf; accessed on 9 September 2022.

⁴¹ EIT Urban Mobility (2021c). Business Plan 2021-2022. Call Manual Factory #ChallengeMyCity. Barcelona, 29 November 2021. https://www.eiturbanmobility.eu/wp-content/uploads/2021/12/BP2022-Call-Manual_Factory_ChallengeMyCity-Amendment-1.pdf; accessed on 9 September 2022

8.2. Supplementary Evidence: Implementation state of play

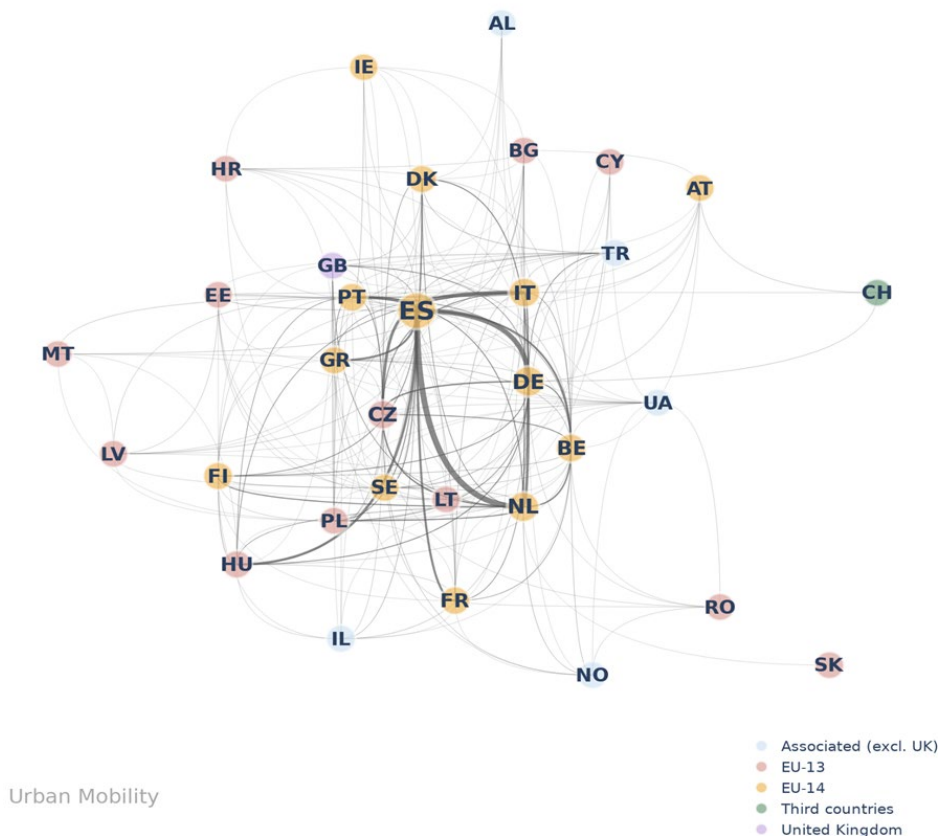


Figure 4: Network interactions of participating partners in KIC activities in the years 2021/2022

Note: Data update on 2nd August 2023

Table 10: Funding by country of participants

| Country | Urban Mobility | | Urban Mobility | |
|----------------|--------------------|-------------------|-------------------|-------------------|
| | in € 2020-2022 | (% of KIC) | in € 2020-2022 | (% of KIC) |
| Total | 120 224 888 | 100% | 69 570 444 | 100% |
| SPAIN | 63 512 752 | 53% | 20 018 415 | 29% |
| GERMANY | 11 712 657 | 10% | 9 702 500 | 14% |
| NETHERLANDS | 9 374 189 | 8% | 7 627 171 | 11% |
| CZECH REPUBLIC | 6 240 901 | 5% | 4 438 277 | 6% |
| ITALY | 5 300 855 | 4% | 5 300 855 | 8% |
| SWEDEN | 3 233 022 | 3% | 3 233 022 | 5% |
| DENMARK | 3 080 685 | 3% | 1 480 377 | 2% |
| FRANCE | 2 205 769 | 2% | 2 205 769 | 3% |
| BELGIUM | 2 133 213 | 2% | 2 133 213 | 3% |
| HUNGARY | 2 067 252 | 2% | 2 067 252 | 3% |
| FINLAND | 1 861 277 | 2% | 1 861 277 | 3% |
| UNITED KINGDOM | 1 626 498 | 1% | 1 626 498 | 2% |
| PORTUGAL | 1 384 685 | 1% | 1 384 685 | 2% |
| ISRAEL | 1 353 387 | 1% | 1 353 387 | 2% |
| GREECE | 840 435 | 1% | 840 435 | 1% |
| all others | 4 297 310 | each less than 1% | 4 297 310 | each less than 1% |

Note: Data update on 2nd August 2023

Table 11: Type of intellectual property right applied for

| KIC | Type | Target | Achieved | Achieved by type |
|--------------------|-------------------|---------------|-----------------|-------------------------|
| EIT Urban Mobility | patent | | | 0 |
| EIT Urban Mobility | trademark | | | 2 |
| EIT Urban Mobility | registered design | N/A | 90 | 0 |
| EIT Urban Mobility | utility model | | | 0 |
| EIT Urban Mobility | other | | | 88 |

Note: Data update on 2nd August 2023. KIC-KPI EITHE01

Table 12: Country of IPR owner

| KIC | Country of the IPR owner | trademark | other |
|--------------------|---------------------------------|------------------|--------------|
| EIT Urban Mobility | SPAIN | 2 | 12 |
| EIT Urban Mobility | ITALY | 0 | 5 |
| EIT Urban Mobility | TÜRKIYE | 0 | 5 |
| EIT Urban Mobility | FRANCE | 0 | 4 |
| EIT Urban Mobility | GR - GREECE | 0 | 3 |
| EIT Urban Mobility | GERMANY | 0 | 2 |
| EIT Urban Mobility | ISRAEL | 0 | 2 |
| EIT Urban Mobility | BELGIUM | 0 | 1 |
| EIT Urban Mobility | NETHERLANDS | 0 | 1 |
| EIT Urban Mobility | NORWAY | 0 | 1 |
| EIT Urban Mobility | PORTUGAL | 0 | 1 |
| EIT Urban Mobility | SLOVENIA | 0 | 1 |
| EIT Urban Mobility | N/A | 0 | 50 |

Note: Data update on 2nd August 2023

Table 13: Country of registration of the supported start-up

| Country of registration of the Start-Up | EIT Urban Mobility |
|--|---------------------------|
| GERMANY | 57 |
| SPAIN | 41 |
| TÜRKYIE | 32 |
| BULGARIA | 24 |
| GREECE | 24 |
| POLAND | 23 |
| PORTUGAL | 23 |
| LATVIA | 21 |
| ROMANIA | 20 |
| ITALY | 17 |
| SWEDEN | 16 |
| BELGIUM | 15 |
| ESTONIA | 15 |
| FRANCE | 15 |
| HUNGARY | 15 |
| SERBIA | 15 |
| CROATIA | 12 |
| SLOVAKIA | 12 |
| CZECH REPUBLIC | 9 |
| NETHERLANDS | 9 |
| UNITED KINGDOM | 7 |
| IRELAND | 5 |
| NORWAY | 5 |
| LITHUANIA | 4 |
| MALTA | 4 |
| SLOVENIA | 4 |
| AUSTRIA | 3 |
| BOSNIA AND HERZEGOVINA | 3 |
| DENMARK | 3 |
| ISRAEL | 3 |
| CANADA | 2 |
| INDIA | 2 |
| SWITZERLAND | 1 |
| AUSTRALIA | 1 |
| FINLAND | 1 |
| NEPAL | 1 |
| RUSSIAN FEDERATION | 1 |
| TUNISIA | 1 |
| US - UNITED STATES | 1 |
| XX - Other Countries | 5 |

Note: Data update on 2nd August 2023

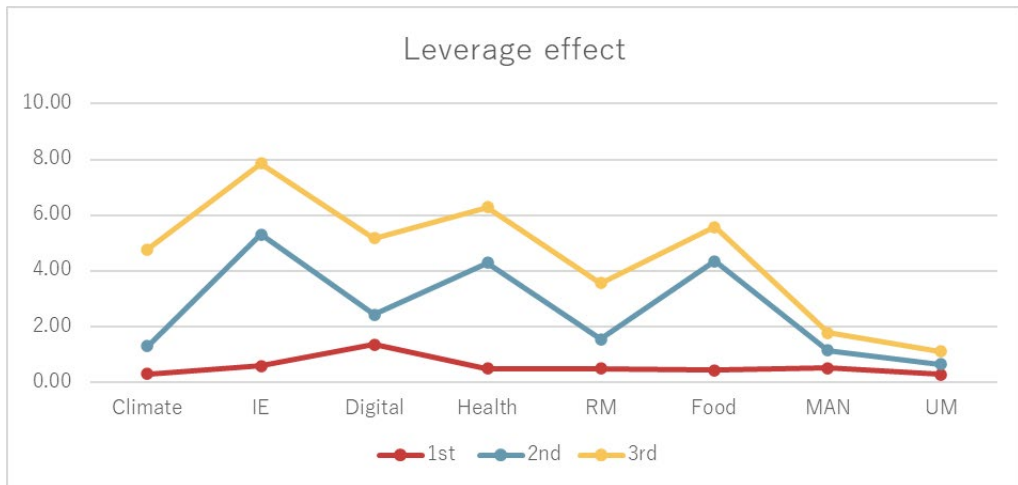


Figure 5: Financial leverage of the KICs (2010-2022)

Notes:

1st = (acquired co-funding + revenues + non EIT financed KAVA)/EIT grant

2nd = (acquired co-funding + revenues + non EIT financed KAVA + co-investment attracted by start-ups)/EIT grant

3rd = (acquired co-funding + revenues + non EIT financed KAVA + co-investment attracted by start-ups + KCA)/EIT grant

KCA have only occurred as one-off effects in 2020

8.3. Supplementary evidence: Results

| EIT KPIs 2021 -2027 | EIT-UM targets Sum of 2021- 2022 | EIT-UM achieved 2021-2022 |
|--|--|---------------------------------|
| EITHE02.1 - Marketed Innovations | 33 | 54 |
| EITHE03.1 - KIC Supported Start-ups/Scale-ups | 233 | 472 |
| EITHE04.1 - Start-ups created of/for innovation | 24 | 29 |
| EITHE05.1 - Start-ups created of EIT labelled MSc/PhD programmes | 6 | 4 |
| EITHE06.1 - Investment attracted by KIC supported start-ups/scale-ups | € 8.525 M | € 34.904M |
| EITHE07.1 - Graduates from EIT labelled MSc and PhD programmes | 50 | 116 |
| EITHE08.1 - Participants in (non-degree) education and training | 5,415 | 16,295 |
| EITHE09.1 - EIT labelled MSc/PhD students and graduates who joined start-ups | 2 | 4 |
| EITHE13.1 - KIC success stories | 40 | 29 |

Figure 6: EIT KPIs 2021-2027

Source: Set numbers are from Annex 1 of the Specific Grant Agreement No. EIT/EIT URBAN MOBILITY/SGA2021 EIT-UM Business Planning 2021, Barcelona, 29.3.2021, p 9f. Achieved numbers are from the Consolidated Annual Activity Report 2022, Budapest, June 2023, p. 92f.

Note: With regard to the missing KPIs, it should be noted that there was no reported information for these in either the Business Plan or the Annual Report or both. This applies in particular to the indicators on financial sustainability

IMPORTANT NOTE: The following two tables are copied from the review of EIT-UM published by Deloitte and White in October 2023, because – contrary to the contractor – they obviously had wider access to data with the granted opportunity to retrieve data from the DUNA portal. Two tables are shown, the first emphasises EIT Core KPIs and the second EIT-UM specific KPIs.

| EIT Core KPIs KPI | 2020 | 2021 | 2021-2022 reported | 2020 targeted | 2021 targeted | 2022 targeted |
|--|-------------|-------------|---------------------------|----------------------|----------------------|----------------------|
| Designed/Tested Innovations | 7* | 46 | 90 | n/a | 17 | 30 |
| EIT RIS Designed/Tested Innovations | n/a | n/a | 29 | n/a | 15% | 15% |
| EIT RIS Countries – Designed/Tested Innovations | n/a | n/a | 6 | n/a | 5 countries/year | 5 countries/year |
| Marketed Innovations** | 21 | 12 | 54 | 8 | 15 | 17 |
| EIT RIS Marketed Innovations | n/a | 7 | 35 | n/a | 15% | 15% |
| EIT RIS Countries – Marketed Innovations | n/a | 6 | 10 | n/a | 5 countries/year | 5 countries/year |
| Supported Start-ups/Scale-ups | 81 | 197 | 472 | 30 | 118 | 100 |
| EIT RIS Start-ups/scale-ups Supported | n/a | 144 | 315 | n/a | 25% | 25% |
| EIT RIS Countries - KIC supported start-ups/scale-ups | n/a | 17 | 18 | n/a | 6 countries/year | 6 countries/year |
| Start-ups created of/for innovation** | 1 | 14 | 29 | 1 | 19 | 10 |
| EIT RIS Start-ups created of/for innovation | n/a | 12 | 23 | n/a | 30% | 30% |
| EIT RIS Countries - start-ups created of/for innovation | n/a | 7 | 11 | n/a | 4 countries/year | 4 countries/year |

| | | | | | | |
|--|---------------|---------------|----------------|-------------|---------------------------------------|------------------|
| Start-ups created of EIT labelled MSc/PhD programmes | n/a | n/a | 4 | 1 | 2 | 4 |
| EIT RIS start-ups created of EIT labelled MSc/PhD programmes | n/a | n/a | 1 | n/a | 15% | 15% |
| EIT RIS Countries - Start-ups created of EIT labelled MSc/PhD programmes | n/a | n/a | 1 | n/a | 1 country per year starting from 2023 | |
| Investment attracted by KIC supported start-ups/scale-ups | EUR 5 410 000 | EUR 4 318 551 | EUR 34 904 077 | EUR 300 000 | EUR 3 000 000 | EUR 5 000 000 |
| Investment attracted by KIC supported EIT RIS start-ups/scale-ups | n/a | EUR 2 018 551 | EUR 4 986 182 | n/a | 15% | 15% |
| EIT RIS Country - Investment attracted by KIC supported EIT RIS start-ups/scale-ups | n/a | 2 | 4 | n/a | 3 countries/year | 3 countries/year |
| Students and Graduates from EIT labelled MSc/PhD programmes**** | n/a | 94 | 116 | n/a | n/a | n/a |
| EIT RIS Graduates from EIT labelled MSc/PhD programmes | n/a | n/a | 5 | n/a | 15% | 15% |
| Graduates from EIT labelled MSc and PhD programmes | n/a | 0 | 22 | 0 | 0 | 50 |

| | | | | | | |
|---|------------------|---------------|---------------|---------------|-------------------|-------------------|
| Students from EIT labelled MSc and PhD programmes | n/a | 94 | 94 | n/a | n/a | n/a |
| % of Graduates in same disciplines from partner HEIs*** | n/a | n/a | n/a | n/a | 0 | 0 |
| Participants in (non-degree) education and training | n/a | 4 767* | 16 295 | 3341 | 2700 | 2700 |
| EIT RIS Participants with (non-degree) education and training | n/a | 2 773* | 10 001 | n/a | 15% | 15% |
| EIT labelled MSc/PhD students and graduates who joined start-ups | n/a | 0* | 4 | n/a | 0 | 2 |
| EIT RIS EIT labelled MSc/PhD students and graduates who joined start-ups | n/a | 0* | 1 | n/a | 15% | 15% |
| # Active KIC Partners*** | n/a | n/a | n/a | n/a | 182 | 202 |
| # Active RIS EIT KIC Partners*** | n/a | n/a | n/a | n/a | 15% | 15% |
| # EIT RIS Countries - Active KIC Partners*** | n/a | n/a | n/a | n/a | 10 countries/year | 10 countries/year |
| FS revenues | EUR 2 783 021.86 | EUR 3 413 752 | EUR 5 792 574 | EUR 3 000 000 | EUR 5 000 000 | EUR 6 600 000 |
| FS coefficient | 10.09% | 12% | 12.22% | 10% | 15% | 18% |
| Co-funding rate | n/a | n/a | n/a | n/a | n/a | n/a |
| KIC success stories | 21 | 16 | 29 | 7 | 20 | 20 |
| EIT RIS Success stories | n/a | 13 | 18 | n/a | 3/year | 3/year |

| | | | | | | |
|--|------|-----|-----|-----|--|--|
| EIT RIS Countries - Success Stories | n/a | 6 | 8 | n/a | 2 countries/year | 2 countries/year |
| Disseminated results, good practices and lessons learnt** | n/a | 14 | 32 | n/a | n/a | n/a |
| # HEIs involved in EIT and KIC activities*** | n/a | n/a | n/a | n/a | 25% of Active KIC partners | 25% of Active KIC partners |
| #RIS HEIs*** | n/a | n/a | n/a | n/a | 15% of HEIs involved in EIT and KIC activities | 15% of HEIs involved in EIT and KIC activities |
| #HEIs involved in the new HEI Action*** | n/a | n/a | n/a | n/a | 6 | 12 |
| # RIS HEIs*** | n/a | n/a | n/a | n/a | 20% | 20% |
| EIT Grant for health activities | n/a | n/a | n/a | n/a | n/a | n/a |
| EIT Grant for sustainability development-related activities (SDGs) | n/a | n/a | n/a | n/a | n/a | n/a |
| Budget consumption of KICs | 100% | n/a | n/a | n/a | n/a | n/a |
| Error rate of KICs | 0 | n/a | n/a | n/a | n/a | n/a |
| Number of new and/or improved support structures and mechanisms (e.g., testbeds, units, programmes, spaces, infrastructures, etc.) established within or mobilised by the HEIs participating in | n/a | n/a | 2 | n/a | n/a | n/a |

| | | | | | | |
|---|-----|-----|----|-----|-----|-----|
| the HEI Capacity Building Initiative | | | | | | |
| Number of new partnerships established by participating HEIs and businesses, research organisations, other actors. | n/a | 2 | 4 | n/a | n/a | n/a |
| Number of organisations from RIS countries that attracted funding from ESIF (in line with Smart Specialisation Strategies) with support from KICs, and the amount of funding attracted | n/a | n/a | 0 | n/a | n/a | n/a |
| Innovation testbeds established | n/a | 28 | 91 | n/a | n/a | n/a |

Values displayed with Italic are retrieved from the Excel table provided by EIT.

* Shows only reported values, validated values were unavailable.

** A duplication on DUNA portal was observed with regards to these KPIs:

- KPI EITHE 02.1 and EITHE 02.4 are both marked with the same name 'Marketed Innovations' and are represented with different data. For the purpose of this assessment, we have taken into account KPI EITHE 02.1 which is the only indicator present in the 2021-2027 Strategic Agenda and the Business Plans.
- KPI EITHE 04.1 and EITHE 04.4 are both marked with the same name 'Start-ups created off/for innovation' and are represented with different data. For the purpose of this assessment, we have taken into account KPI EITHE 04.1 which is the only indicator present in the 2021-2027 Strategic Agenda and the Business Plans.
- KPI EITHE 14.1 and EITHE 15.1 are both marked with the same name 'Disseminated results, good practices and lessons learnt' and are represented with different data. For the purpose of this assessment, we have taken into account KPI EITHE 14.1 which is the only indicator present in the 2021-2027 Strategic Agenda and the Business Plans.

*** KPI indicator not available on DUNA portal but present in Strategic Agenda.

**** New indicator including both enrolled and graduated students. Targeted values are not present in Strategic Agenda.

| KPI | 2020 | 2021 | 2021-2022 reported | 2020 targeted | 2021 targeted | 2022 targeted |
|---|--------------|-------------|---------------------------|----------------------|----------------------|----------------------|
| Companies involved in EIT labelled programmes. | 28* | 53* | 90 | 10 | 20 | 31 |
| Participants in all Academy activities | 4 184* | 776* | 9 469 | 3 341 | 5 450 | 10 670 |
| Members of City Club | 16* | 23* | 51 | 20 | 27 | 35 |
| City engagements in projects | n/a | 58* | 146 | n/a | n/a | n/a |
| City Club events and meetings | n/a | 7* | 12 | n/a | n/a | n/a |
| Order for Factory consultancy | 1* | 6* | 36 | 3 | 7 | 12 |
| Outreach events in EIT RIS countries | 30* | 156* | 355 | 5 | 6 | 10 |
| Sub-grants to EIT RIS country partners | 26* | 63* | 114 | 10 | 13 | 15 |
| Education activities at EIT RIS hubs | 2* | 41* | 103 | 8 | 15 | 26 |
| Entries in idea and business competitions | 194* | 333* | 394 | 24 | 36 | 98 |
| Investments secured via Finance2Move (EUR value in 2020 but number of investments) | EUR 760 000* | 65* | 193 | 10 | 25 | 35 |

| | | | | | | |
|---|------------|----------------|----------------|---------|-----------|-----------|
| secured in 2021-2022 period and in case of targeted values) | | | | | | |
| Number of community events, external events and third-party events | 156* | 313* | 691 | 25 | 34 | 43 |
| Annual reach of impressions for EIT Urban Mobility online content | 1 851 453* | 1 270 310* | 2 385 396 | 728 000 | 1 312 000 | 2 016 000 |
| Partner satisfaction rate (%) | 603* | 73%* | 76.5%* | n/a | n/a | n/a |
| Employee satisfaction (%) | 511* | 76%* | 76% | n/a | n/a | n/a |
| Startups where EIT UM owns equity | n/a | 31* | 111 | n/a | n/a | n/a |
| Designed/Tested Innovations | 7* | 19* | 58 | n/a | n/a | n/a |
| Number of new courses developed | n/a | 67* | 101 | n/a | n/a | n/a |
| Number of courses delivered | n/a | 23* | 57 | n/a | n/a | n/a |
| Value of Equity Assets | n/a | EUR 2 671 200* | EUR 10 457 312 | n/a | n/a | n/a |
| Number of new and/or improved support structures and | n/a | n/a | 13 | n/a | n/a | n/a |

| | | | | | | |
|---|-----|------|-----|-----|-----|-----|
| mechanisms established within or mobilised by the HEIs participating in the HEI Capacity Building Initiative | | | | | | |
| Number of new partnerships established as a result of the HEI Capacity Building Initiative | n/a | 2* | 16 | n/a | n/a | n/a |
| Staff retention | n/a | 93* | 93 | n/a | n/a | n/a |
| Training days | n/a | 2* | 5 | n/a | n/a | n/a |
| Efficiency of calls | n/a | 5* | 5 | n/a | n/a | n/a |
| Efficiency of granting from calls | n/a | 100* | 99 | n/a | n/a | n/a |
| Innovation pilot scaling | n/a | 6* | 16 | n/a | 7 | 10 |
| Demonstration/pilots/living labs within a project that actively involve citizens and/or local associations | n/a | 51* | 114 | n/a | 44 | 51 |
| Public realm improvements | n/a | 20* | 31 | n/a | 50 | 75 |

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This evaluation report is part of the interim evaluation of Horizon Europe activities related to the Green Transition. It presents the assessment of the KIC EIT Urban Mobility (EIT-UM) against the evaluation criteria of relevance, coherence, efficiency, effectiveness, EU added value, additionality, directionality, international positioning and visibility, transparency and openness as well as phasing out preparedness. The evaluation of the partnership is based upon a mixed-method approach including quantitative and qualitative data analysis.

Studies and reports

