



POLICY REPORT

'European project BENEFIC'
Evaluation and policy
recommendations



AUDITOR: Flemish government - Department for Mobility and Public Works
CONTACT PERSON: Simon Ruyters
SERVICE PROVIDERS: The New Drive & Grant@vice
CONTACT PERSONS: Dries Keunen (dries.keunen@thenewdrive.be, +32 498 38 46 44)
Danielle Baetens (danielle@grantadvice.be, +32 495 20 88 74)
DATE: February 2024
OUR REFERENCE: 02603 1M2B6M-2-75539



Management Summary

This policy report acts as an evaluation of the European BENEFIC project. We first look back at the course and results of BENEFIC. From this evaluation, conclusions and policy recommendations are then formulated.

In a nutshell, the following results have been achieved through BENEFIC: **460 extra alternative fuel/charge points were created at 217 locations in Flanders, Brussels Capital Region and the Netherlands**. These numbers were reached by the implementation of 31 different projects and a total grant amount of € 5.201.005.

In the context of this evaluation report, interviews were conducted with a selection of stakeholders involved in the BENEFIC-project. Below an overview of the **main conclusions** from the BENEFIC project are added (a complete overview is available in chapter 7):

- **Ambition vs results:**
 - Mixed result across different infrastructure categories, with some achieving fewer infrastructure points than initially envisaged, while others surpassing the initial projections;
 - Sufficient market interest throughout the three open calls for projects;
- **Project management:**
 - The administrative workload by the grant applicants was generally evaluated as positive, although the “smaller” market players are more likely to state that the workload was intense;
 - The project coordinator of BENEFIC noticed a large impact on the workload (in the coordination and follow-up of BENEFIC);
 - Implementation of projects was effected by some societal and market challenges;
- **Grant Scheme evaluation:**
 - Regional/national governments as project partners with in-depth knowledge and local context proved to be a great advantage in managing a Grant Scheme;
 - The coordinating partner had to deal with financial risks as they had to pre-finance most of the co-financing funds;
 - It proved to be challenging to translate the EU requirements into regional/national open project calls;
 - In general there was a (more or less) balanced distribution of funds along the BENEFIC partners;
- **Grant Scheme and market effects:**
 - Created a balanced and fair platform for both public and private investments through its strategic open calls;
 - Played a central role in generating leverage for additional and prospective public as well as private investments;
 - Several stakeholders – who started with infrastructure roll-out as a result of BENEFIC – continued to deploy infrastructure beyond the project's duration.

Based upon these conclusions the following (policy) recommendations are formulated from the experiences with the BENEFIC-project:

1. A well-considered design of the Grant Scheme can increase impact and effectiveness
2. Broader policies and targets should be considered as a starting point for Grant Scheme ambitions
3. The establishment of a cross-border learning network can increase the impact of the Grant Scheme
4. Target specific areas for investment support
5. Ensure complementary with national and regional calls
6. Consider additional services beyond financial support



Content

1. Introduction BENEFIC: what's in the name?.....	5
1.1. Situation and framing	5
1.2. BENEFIC history in a nutshell	6
1.3. Framework of BENEFIC	8
2. The BENEFIC project vs. other grant schemes and grant projects from the European institutions	10
3. The ambition of BENEFIC	13
4. The grant scheme of BENEFIC.....	15
5. Realisations of BENEFIC	17
5.1. Requested projects per project call	17
5.2. Selected projects per project call	20
5.3. realised Infrastructure	24
6. In-depth interview results	26
6.1 Results in-depth interviews with grant applicants	26
6.1.1. Setup	26
6.1.2. Methodology: Qualitative coding.....	27
6.1.3. Conclusions in-depth interviews and quantitative data grant applicants	27
6.2 Results in-depth interviews CINEA & CEF team flemish government	29
6.2.1. Setup	29
6.2.2. Methodology: Qualitative coding.....	29
6.2.3. Conclusions in-depth interviews and quantitative data from CINEA & CEF TEAM FLEMISH GOVERNMENT .	29
6.3 Results in-depth interviews Project partners	30
6.3.1. Setup	30
6.3.2. Methodology: Qualitative coding.....	30
6.3.3. Conclusions in-depth interviews and quantitative data from the project partners.....	31
7. Overall Conclusions and recommendations BENEFIC.....	33
7.1 Conclusions of BENEFIC	33
7.1.1. Ambition versus results.....	33
7.1.2. Project management.....	34
7.1.3. Grant Scheme evaluation	35
7.1.4. Grant Scheme and Market effects	36
7.2 (policy) Recommendations of BENEFIC	37
7.2.1. A well-considered design can increase impact and effectiveness	37
7.2.2. Broader policies and targets as a starting point for grant scheme ambitions	37
7.2.3. Establish a cross-border learning network.....	37
7.2.4. Target specific areas for investment support.....	38
7.2.5. Ensure complementarity with national and regional calls.....	38
7.2.6. Consider additional services beyond financial support.....	38



Overview figures

Figure 1: scope BENEFIC.....	5
Figure 2: timeframe of BENEFIC.....	7
Figure 3: TEN-T network.....	8
Figure 4: BENEFIC ambitions.....	14
Figure 5: overview maximum amounts of co-financing per unit for each technology	16
Figure 6: requested charging and refuelling infrastructure BENEFIC.....	17
Figure 7: selected charging and refuelling infrastructures BENEFIC.....	21
Figure 8: effectively realised charging and refuelling infrastructures BENEFIC.....	24
Figure 9: timeframe in-depth interviews	26

Overview graphics

Graph 1: overview of requested charging and refuelling infrastructures by project call and scope	18
Graph 2: overview of requested grant amount according to project call and scope	19
Graph 3: overview of selected charging and refuelling infrastructures by project call and scope	22
Graph 4: overview of selected grant budget according to project call and scope.....	23
Graph 5: overview realised loading and refuelling infrastructures according to project call and scope of application.....	25
Graph 6: overview realised grant budget according to project call and scope.....	25

Overview tables

Table 1: overview of selected projects by project call	20
Table 2: overview of grant applicants interviewed by project call, scope and category	27
Table 3: key figures BENEFIC.....	33
Table 4: overview of ambitions versus results in amount of projects	34
Table 5: overview of ambitions versus results in grant amount	36



Reading guide

This reading guide lists the chapters of the policy document '*Evaluation and Policy Recommendations*'. Before the summary, the purpose, target group and markup of this policy document are described.

The purpose of this policy document is to look back at the BENEFIC project and carry out an objective and qualitative analysis of the project that allows conclusions and policy recommendations to be formulated. The target group of this policy document concerns the three project partners – namely Flanders, Brussels Capital Region and the Netherlands – and their stakeholders. This policy document has been produced based on the Grant Agreement, objective information related to the three open project calls (launch calls and submitted, selected and effectively realised projects) and information through the in-depth interviews of the various stakeholders.

Chapter 1 provides a brief **introduction to the BENEFIC project**. This discusses the setting, framework, history and framework of BENEFIC.

Chapter 2 consists of the **description of the BENEFIC project in relation to other Grant Schemes and grant projects from the European institutions**. Here, it elaborates on the various programmes and funds set up to support sustainable mobility infrastructure in European Union member states.

Chapter 3 concerns the **ambitions of the BENEFIC project**. What objectives (in figures) have been set in advance?

Chapter 4 presents and **compares the realisations of the BENEFIC project in figures**. This covers both the projects applied for, those selected, and those realised.

Chapter 5 describes the **approach of the in-depth interviews** of grant applicants, project partners and regional authorities conducted in the context of BENEFIC, as well as **summary findings on these**.

Chapter 6 presents both **conclusions and (policy) recommendations** of the BENEFIC project.

We wish you much reading pleasure in advance!



1. INTRODUCTION BENEFIC: WHAT'S IN THE NAME?

1.1. SITUATION AND FRAMING

The acronym of BENEFIC stands for '*BrussEls NEtherlands Flanders Implementation of Clean power for transport*' and is a cross-border and innovative European grant project for the development of charging and refuelling infrastructure for alternative fuels for transport in Flanders, the Brussels Capital Region and the Netherlands. Specifically, it involves the following categories of alternative charging and refuelling infrastructure:

- Charging infrastructure (normal and (ultra) fast charging infrastructure) for
 - Electric vehicles
 - Electric taxis
 - Electric buses
- CNG and LNG infrastructure
- Hydrogen refuelling infrastructure
- Shore power for inland navigation infrastructure

The BENEFIC project was initiated and implemented by 3 partner countries/regions (figure 1):

- Flemish government
 - Department of Mobility and Public Works¹
- Brussels Capital Region
 - Brussels Environment
 - Brussels Mobility
- Dutch national government
 - Ministry of Infrastructure and Water Management



Figure 1: scope BENEFIC

These partners - under the coordinator-ship of the Flemish government - joined forces in 2017 to support alternative charging and refuelling infrastructure using European funds. Funding for BENEFIC was secured through the European Union's Connecting Europe Facility (CEF)

¹ Initially the project was coordinated by the Department of Environment and Spatial Development, but the project was - together with the Clean Power for Transport policies - transferred in 2021 to the Department of Mobility and Public Works.



programme. From EU side, the BENEFIC project was followed up by the European Climate Infrastructure and Environment Executive Agency (CINEA)².

A total budget of EUR 7.330.000 was available through the BENEFIC project to subsidise projects for the roll-out of charging and refuelling infrastructure for alternative fuels for transport in partner countries/regions.

1.2. BENEFIC HISTORY IN A NUTSHELL

The BENEFIC project originated and started in 2017 with the signing of the Grant Agreement between the Flemish government and CINEA. The partners then launched open project calls to leverage European funds to subsidise various alternative charging and refuelling infrastructure projects. A total of 3 open project calls were launched between early 2018 and mid-2021. In the first project call (2018), all refuelling and charging infrastructure technologies were in scope. In the second (2019) and third (2021) project calls, the focus was put only on zero-emission technologies. Moreover, the geographical scope of the last project call was limited to Flanders and the Brussels Capital Region and no longer the Netherlands.

All projects initially had to be realised by the end of 2020 at the latest. As several projects could not meet this deadline (e.g. due to the outbreak of the COVID pandemic and worldwide issues with delivery times of technical components), it was decided - after consultation with and approval by CINEA - to extend BENEFIC until the end of 2022. Due to further delays in the roll-out (due to the aftermath of the COVID pandemic as well as the war in Ukraine, which caused additional delays in delivery of hardware), a second extension was requested and obtained whereby BENEFIC's implementation period was extended until the end of 2023.

A schematic overview of the course of the BENEFIC project is shown in the following figure.

² CINEA is the successor to the Executive Agency for Innovation and Networks, abbreviated INEA, which initially followed the project.

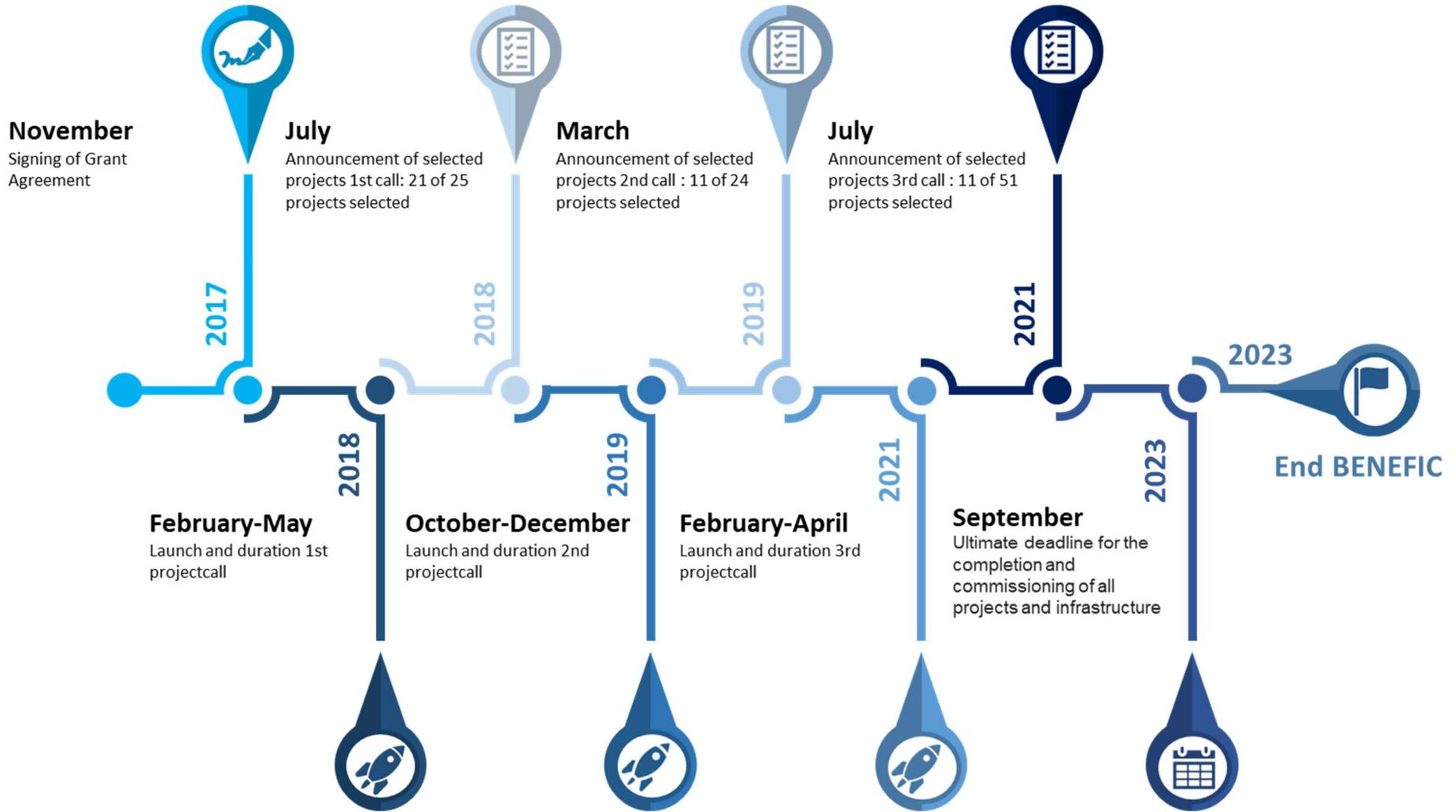


Figure 2: timeframe of BENEFIC

1.3. FRAMEWORK OF BENEFIC

BENEFIC was established in response to the European Union directive on alternative fuels infrastructure (2014/94/EU) and the Belgian and Dutch national policy frameworks developed to implement the directive.

BENEFIC aimed to facilitate a breakthrough of clean and green transport technologies in partner countries/regions by providing an attractive framework for investment in alternative fuel infrastructure.

BENEFIC was funded by the European Union's Connecting Europe Facility (CEF)³ programme. CEF is a “key EU funding instrument to promote growth, jobs and competitiveness through infrastructure investment at the European level. CEF supports the development of high-performing, sustainable and efficiently interconnected trans-European networks in transport, energy and digital services”.

Trans-European transport network policy, also known as TEN-T (see also Figure 3), concerns “the implementation and development of a European network of railway lines, roads, inland waterways, maritime routes, ports, airports and railway terminals. The ultimate goal is to close gaps, remove bottlenecks and technical barriers and strengthen social, economic and territorial cohesion in the EU”.

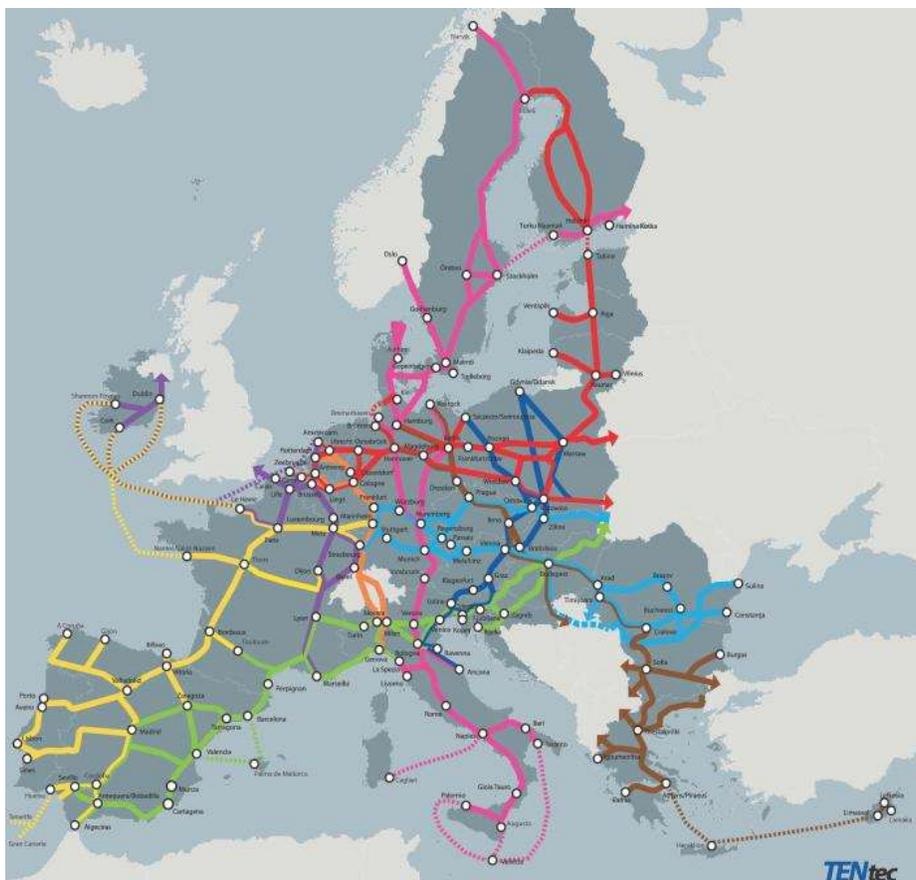


Figure 3: TEN-T network

³ https://cinea.ec.europa.eu/programmes/connecting-europe-facility_en



CEF is divided into three sectors:

- **CEF Energy:**
CEF Energy provides to meet future energy demand, ensure security of supply or support large-scale introduction of energy from renewable sources. Improving existing and developing new energy transmission infrastructures are of European interest.
- **CEF Telecom:**
CEF Telecom facilitates cross-border interaction between public authorities, businesses and citizens through the deployment of digital service infrastructures and broadband networks. The aim is to facilitate the creation of a European ecosystem of interoperable (compatible) and interconnected digital services that support the digital single market.
- **CEF Transport:**
CEF Transport implements European transport infrastructure policy and supports investments in building new transport infrastructure in Europe as well as rehabilitating and upgrading existing infrastructure.

CEF Transport focuses on cross-border projects and projects to remove bottlenecks or bridge missing links in different parts of the network, as well as traffic management systems. CEF Transport also supports innovation in the transport system to improve the use of infrastructure, reduce the environmental impact of transport, improve energy efficiency and increase safety. One of CEF's main priorities is to enable and strengthen synergies between these Energy, Telecoms and Transport sectors. Cross-sectoral actions can be used to optimise costs or results, thereby increasing the effectiveness of EU funding.

The coordination of the CEF programme and project execution was delegated to different agencies of the European Commission over the years, namely first under the Trans-European Transport Network Executive Agency, then under INEA and currently under CINEA.

In fact two components of CEF fall under the mandate of CINEA, namely CEF Transport and CEF Energy. CEF Transport and CEF Energy fall under Department B, Sustainable Networks and Investment of CINEA.



2. THE BENEFIC PROJECT VS. OTHER GRANT SCHEMES AND GRANT PROJECTS FROM THE EUROPEAN INSTITUTIONS

The European Union (EU) has established several programmes and funds to support sustainable mobility infrastructure in its member states. An overview of some key programmes until 2021 (the period that the last call of BENEFIC was launched) is given below:

- **Horizon 2020:** Although this is primarily a programme for research and innovation, it also includes funding for sustainable mobility projects, particularly in the context of research into clean and efficient transport solutions;
- **European Regional Development Fund (ERDF):** This fund provides financial support for infrastructure development, including transport infrastructure. It has a focus on regional development, making it particularly useful for local and regional sustainable mobility initiatives;
- **Cohesion Fund (CF):** Intended for member states with a gross national income (GNI) per capita below 90% of the EU average. It can be used for trans-European transport networks and environmental projects, including sustainable mobility infrastructure;
- **European Investment Bank (EIB):** Although this is not a grant programme per se, the EIB often offers favourable financing conditions for major infrastructure projects, including those in the field of sustainable mobility;
- **Interreg:** This is a series of programmes aimed at promoting territorial cooperation between EU member states. They can also be used to finance cross-border sustainable mobility projects.

Subsidised projects such as these within CEF, Horizon 2020 (and its successor Horizon Europe), ERDF, CF, Interreg and local grant mechanisms consists of a project consortium receiving a financial contribution to achieve an objective, being a research, demonstration or implementation project. The project partners work together to achieve the objectives, using the financial resources to cover costs they would otherwise have to bear entirely on their own. Project funding ensures that the project partners are willing to put in the effort, work together and share results and findings. For the grantor, it means that its higher goals are fulfilled, e.g. explore new technologies, demonstrate new technologies, realise sustainable investments. The aim here is always to alleviate existing challenges third parties face, making third parties willing to take the plunge after all. Eventually, the subsidies for these objectives will disappear once a technology has been adopted, is known to users and has become affordable, thus finding its place in our economy and society. Project partners, especially in European subsidy programmes, in general are research institutions, governments and larger companies. For smaller entities, the programmes are usually still a big unknown and/or they are put off by the administration involved in applying for a grant and/or the reporting involved.

For some years now, programmes have also been set up where the project consortium itself can launch project calls, also referred to as "Grant Schemes". Initially, these were the larger European programmes where the consortium was then asked to launch specific calls itself. The underlying idea here was that consortia are often even better informed than the EC about new developments going on. The consortium could then launch even more specific calls that third parties could subscribe to. This approach has the advantage that smaller players could also participate more easily in large-scale projects, allowing them to continue their developments as well as expand their network through the contacts within the larger consortium. Consequently, a multitude of smaller entities have become well-acquainted with EU support



measures. This increased familiarity has facilitated the integration of technologies that might otherwise have languished unused, allowing them to successfully enter the market.

This type of mechanism whereby an entity applies for project grants and then launches its own project calls is usually set up when there is a clear need to support several smaller projects or initiatives within a larger geographical or sectoral context. To support such initiatives, voucher schemes are also sometimes used to provide quick and efficient financial support to a large number of smaller beneficiaries, such as small and medium-sized enterprises or local authorities.

Within the Interreg programme, this form of grant funding is enjoying success with local Small and Medium Enterprises (SMEs) well knowing the way to these calls and/or being well informed through a variety of channels. Governments and entities with strong government support, apply for a grant from Interreg after which they launch and manage project calls themselves. Such programmes are very successful among smaller project applicants, allowing the objectives of Interreg and, by extension, of the European Union and local governments to be met. These programmes support the local economy. For the intermediaries, i.e. governments and entities with strong government support, monitoring means an administrative task which are rather considered part of the normal activities and whose realisation is part of the objectives of these entities.

BENEFIC used this principle of a "Grant Scheme" - as suggested in the CEF Transport call of 2016 - whereby the project consortium provides funding to smaller projects and entities to realise the roll-out of sustainable mobility along the TEN-T network. By deploying the Grant Scheme, the project consortium aimed to create a level playing field for public and private investment through open calls for proposals. This allowed BENEFIC to reach a wide range of public and private parties, i.e. from small to large, local to international.

In doing so, BENEFIC was able to leverage smaller players to make investments locally and attracted the attention of competitors to act as well. The mechanism set up therefore accelerates additional and future public and private investments in alternative fuel infrastructure, i.e. the Grant Scheme mechanism thus supports the acceleration of the energy transition.

Coordinating large-scale funding initiatives such as the BENEFIC project brings undeniable challenges. The coordinator is entrusted with a multitude of tasks, including issuing and managing project calls, following up the individual projects technically and substantively, and monitoring and encouraging their successful implementation. All this requires considerable time, resources and expertise, resulting in high investment costs per individual realisation.

However, the importance of such initiatives cannot be underestimated, especially in sectors in which the large-scale adoption of a new technology is hampered by a circular supply and demand situation. For example, consumers are reluctant to buy electric vehicles if there are not enough charging stations, but investors are reluctant to invest in charging stations if there are not enough electric vehicles on the road. In such scenarios, even a relatively small subsidy from a government agency can be a tipping point. When a government is willing to invest in infrastructure rollout itself, it can serve as a signal of confidence and support for private investors. It can persuade them to invest as well, which in turn accelerates technology adoption.

Anno 2023, the principle of "Grant Scheme" within the CEF programme is included in the project calls where project consortia are invited to draw out "Grant Scheme" to finance, among other things, studies in preparation for deployment of innovative concepts. Within



other European programmes this grant form is also being promoted, a recent example being the LIFE-CET Enercom project call (2023) where submitters were asked to propose an approach to set up and manage a "European Energy Communities Facility". In doing so, the "Facility" should provide financial support to third parties and appropriate support services for the early stages of EU energy communities projects. The majority of the funds (minimum 70%) should thereby be used by the project consortium to support third parties. Overall, it can be said that BENEFIC was among the front runners of deploying Grant Schemes to help accelerate the energy transition by involving more entities, including smaller players, in accelerating the roll-out of infrastructure that is primordial to achieving climate goals.



3. THE AMBITION OF BENEFIC

Within the contours of the grant agreement, specific ambitions (ea. expected results and deliverables) were formulated per partner country/region. For the elaboration of these ambitions the partner countries/regions looked at the implementation of the Clean Power for Transport Directive (2014/94/EU) and contribute to the realisation of the national policy frameworks of Belgium and the Netherlands. Ultimately, this resulted in the following specific ambitions for BENEFIC:

- 600 regular chargers for electric vehicles (>11kW) in Flanders
- 100 fast chargers for electric vehicles (>50kW)
 - 80 in Flanders
 - 10 in Brussels
 - 10 in the Netherlands
- 10 ultra fast chargers for electric vehicles (>150kW)
 - 7 in the Netherlands
 - 2 in Flanders
 - 1 in Brussels
- 5 fast chargers specifically for electric taxis (>50kW) in Flanders
- 5 quick chargers for electric buses
 - 4 in Flanders
 - 1 in the Netherlands
- 50 regular chargers for electric buses
 - 44 in Flanders
 - 6 in the Netherlands
- 2 CNG (in Brussels) and 2 combined LNG-CNG filling stations (in Flanders) for natural gas vehicles
- 9 hydrogen refuelling stations
 - 7 in the Netherlands
 - 2 in Flanders
- 13 shore power installations for inland navigation
 - 10 in Flanders
 - 3 in Brussels

In total, the ambition was to subsidise 796 alternative charging and refuelling infrastructures within BENEFIC.

The figure on the next pages (Figure 4) shows the level of ambition at the start of BENEFIC. The ambition established at the outset/start of BENEFIC was an estimation derived from the market situation prevailing at that time. The effectiveness of realisations depended on the response to open project calls and the market developments of the various technologies within the timeframe of the project.

The aim is to assess how the final outcomes achieved within BENEFIC align with the initially established ambitions. This evaluation is detailed later in this policy report.

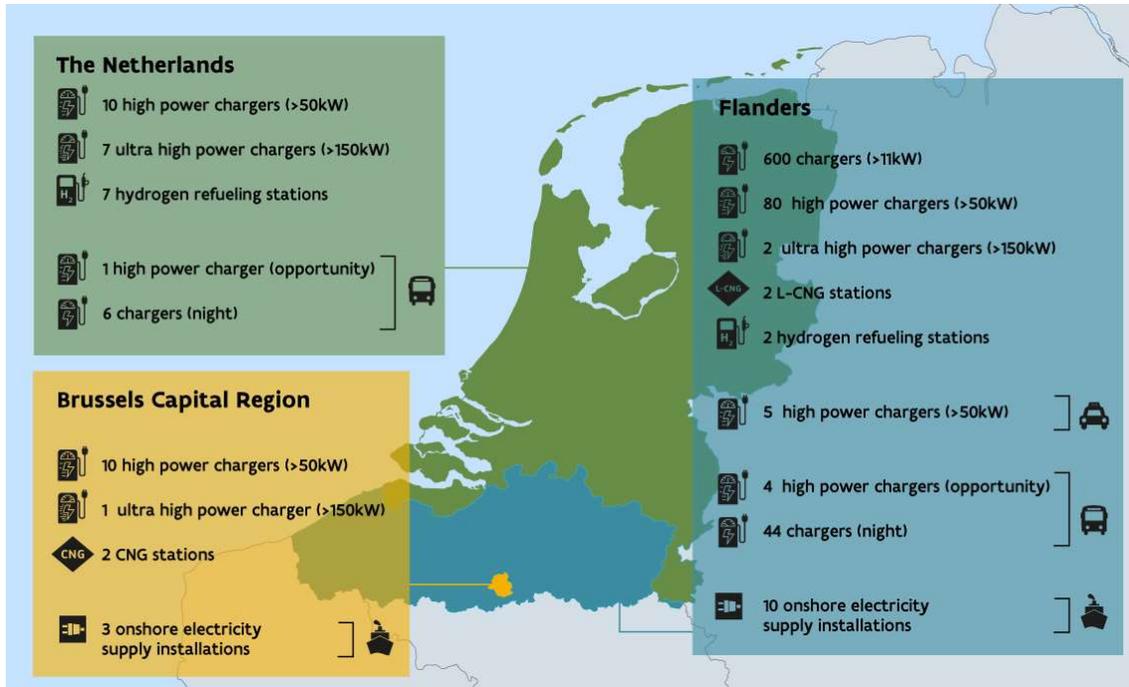


Figure 4: BENEFIC ambitions



4. THE GRANT SCHEME OF BENEFIC

Below a summary is added of the eligibility and selection criteria which were to be applied in assessing and evaluating the submitted projects in the open calls for proposals:

- **Eligibility criteria:**
 - Compliance with all relevant applicable EU and nation law
 - Financial capacity of the project promotor(s)
 - Respect for the thresholds and limitations defined in the call text
 - No overlap of the proposal with other EU co-funded initiatives
 - Location of the proposed action in Flanders Region, the Brussels Capital Region and/or the Netherlands
 - Location on or near the TEN-T core network or in a (urban) node of the TEN-T core network
 - Public access for users in line with the CPT directive (24/7)
 - Completeness and quality of the application
- **Selection criteria:**
 - Maturity of implementation plan – including the permitting
 - Scale of the project and potential for economies of scale and further roll-out in the partner countries, in particular in cross-border areas
 - Realisation time of the project
 - Expected impact and contribution to the Nationale Policy Frameworks on the roll-out of alternative fuels infrastructure of Belgium and the Netherlands
 - Value for money regarding the envisaged investments in alternative fuels infrastructure
 - Innovative aspects of the project

In addition, each type of infrastructure had to be compliant with specifically defined technical specifications.

By way of illustration, in the figure on the next page a summary is shown of the maximum amounts of co-financing per unit for each type of alternative fuels infrastructure as defined at the start of the project. These maximum amounts were added in the grant scheme and subsequently applied in the open project calls.

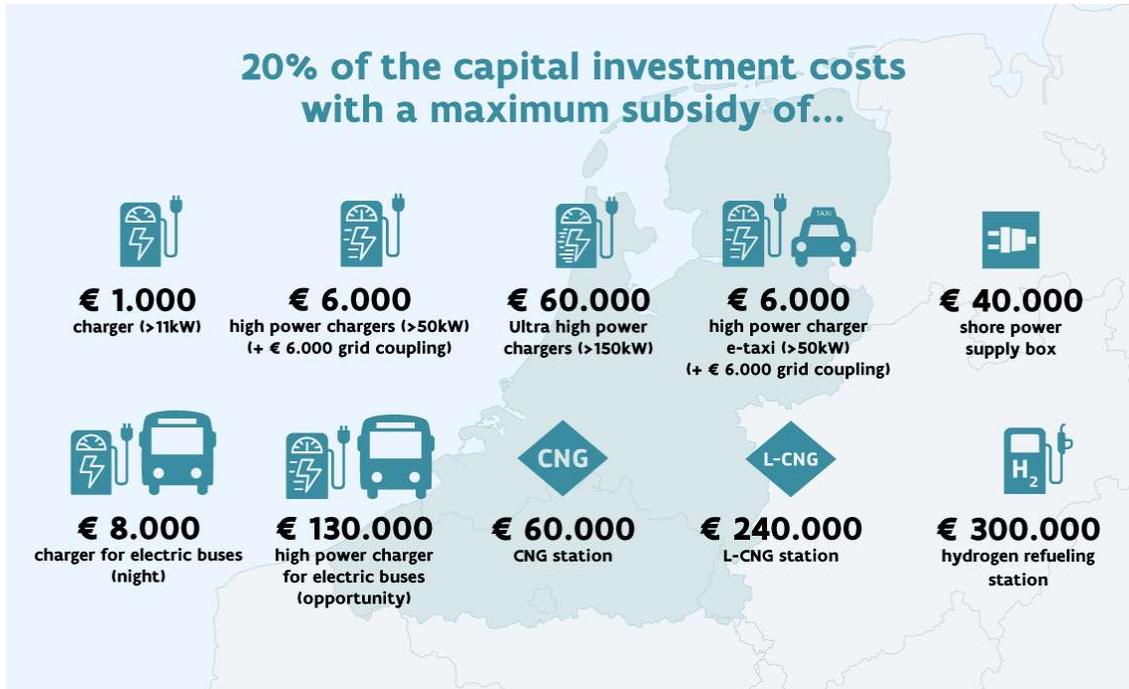


Figure 5: overview maximum amounts of co-financing per unit for each technology



5. REALISATIONS OF BENEFIC

This chapter zooms in on the realisation of the BENEFIC projects. A distinction is made successively between the projects applied for per open call, the projects selected/subsidised per call and finally the realisations for each call.

5.1. REQUESTED PROJECTS PER PROJECT CALL

A total of 3 open project calls, between early 2018 and mid-2021, were launched through BENEFIC. A total of 100 projects, including 25 in project call 1, 24 in project call 2 and 51 in project call 3, were applied for within this framework. A total of 3.214 different alternative charging and refuelling infrastructures were applied for across the entire BENEFIC project, considering that one normal charger and for instance a hydrogen station equally counts. Regardless, the figure below (Figure 6) gives a visual overview of the total requested infrastructure for each partner.

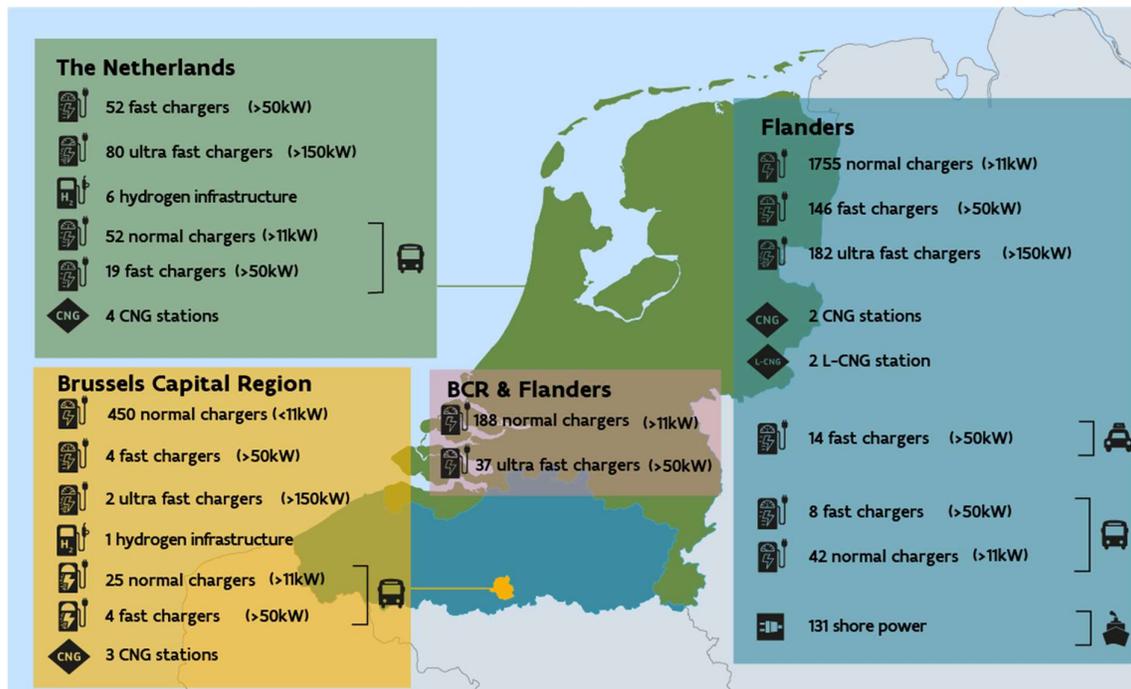


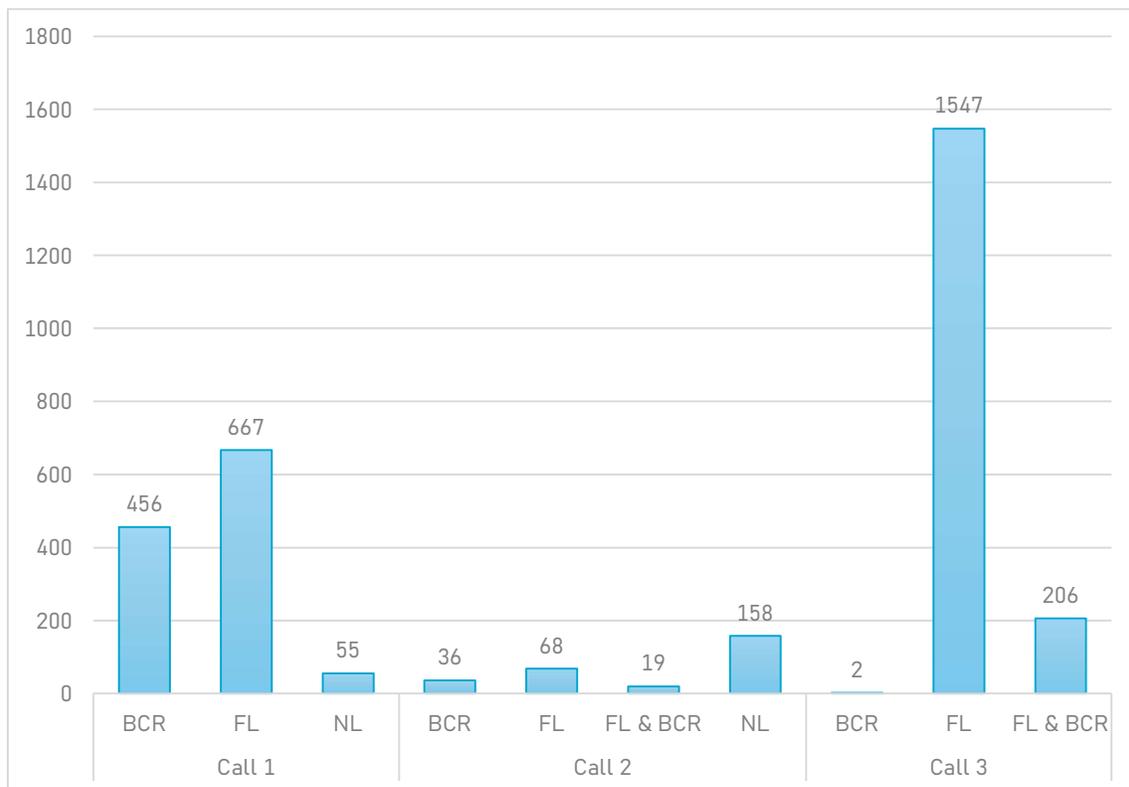
Figure 6: requested charging and refuelling infrastructure BENEFIC

The following graph (graph 1) shows the numbers of requested charging and refuelling infrastructures per project call (1st, 2nd or 3rd) and per partner. The number of requested charging and refuelling infrastructures for the 1st project call was 1.178, for the 2nd project call 281 and for the 3rd project call 1.755. The number of requested charging and refuelling infrastructures – across the 3 open project calls – for partner Brussels Capital Region was 494 and for Flanders and the Netherlands 2.282 and 213 respectively. A further 225 charging and refuelling infrastructures were applied for in project calls 2 (19) and 3 (206) for the Flanders and Brussels Capital Region regions (could not be viewed separately).



Based on the subsidy projects applied for, the following findings can be drawn regarding the numbers of infrastructure points:

- Demand for alternative charging and refuelling infrastructure was highest for the 3rd project call;
- The demand for alternative charging and refuelling infrastructure was smallest for the 2nd project call (October–December 2019);
- The scope Flanders has the highest number of applications for alternative charging and refuelling infrastructure across project call 1 and 3;
- The scope Netherlands has the smallest number of applications for alternative charging and refuelling infrastructures across project call 1, mostly because no normal charger projects were applied for.



Graph 1: overview of requested charging and refuelling infrastructures by project call and scope

In addition to analysing the number of projects and infrastructures applied for, it is also useful and interesting to look at the grant budget applied for and how this varies by project call and scope (graph 2). A total of €21.035.944 grant budget was applied for over the entire BENEFIC project.

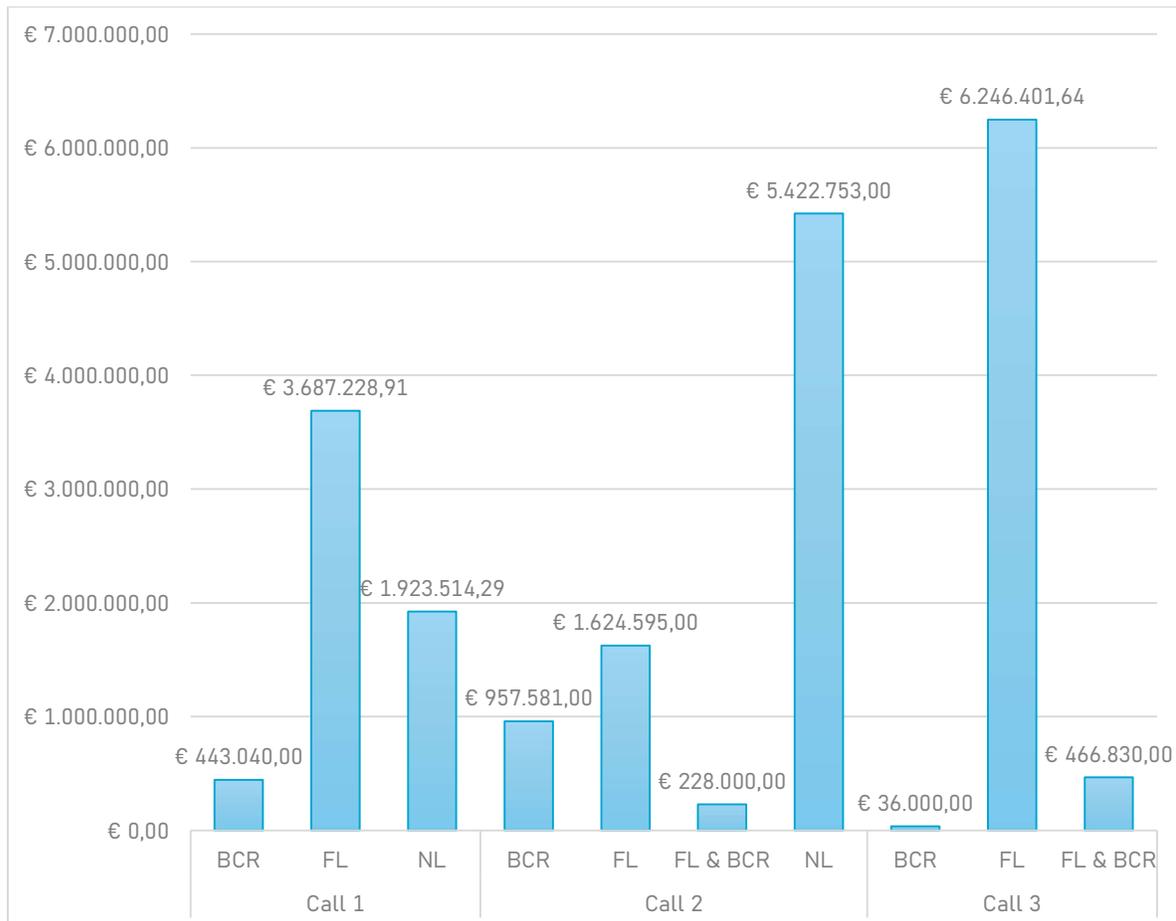
The requested grant budget was €6.053.783 for the 1st project call, €8.232.929 for the 2nd project call and €6.749.232 for the 3rd project call. The available budget per project call was €7.330.000 for the first call, €1.672.245 for the second call and €1.600.000 for the third and last call. The last call was a so-called 'reflow' call, where the residual budget of already completed projects and discontinued projects was reused.



The total requested grant amount for Brussels Capital Region was €1.436.621, for Flanders €11.558.225,55 and for the Netherlands €7.346.267,29. A further €694.830 worth of charging and refuelling infrastructure was applied for in project call 2 (€228.000) and 3 (€466.830) for Flanders and Brussels Capital Region regions.

The following findings can be drawn from the subsidies applied for:

- The requested grant budget for project call 1 was smaller than what was available. For the second and third project calls, more grant budget has been applied for than was available.
- The application for grant budget was largest in the 2nd project call;
- The request for subsidy budget was smallest for the 1st project call (possibly due to the awareness of BENEFIC, which has increased since the first call);
- Within the application area Flanders, the largest subsidy budget was applied for across project calls 1 and 3;
- Within the application area BCR, the smallest subsidy budget was applied for across the 3 project calls on average.



Graph 2: overview of requested grant amount according to project call and scope



5.2. SELECTED PROJECTS PER PROJECT CALL

Below an overview of the selected projects for each project call is presented (Table 1).

Category	Project call 1			Project call 2			Project call 3			
	Quantity	Region	Beneficiary	Quantity	Region	Beneficiary	Quantity	Region	Beneficiary	
Normal chargers	175	BCR					6	FL		
	104	FL					60	BCR		
	300	FL								
Fast chargers	82	FL, NL & BCR		8	12	NL FL	4	FL		
	7	NL & FL								 
	8	NL & FL								
Ultra fast chargers	19	FL, NL & BCR		7	10	NL NL FL	10	1	FL FL FL	
	6	NL & FL								  
L-CNG stations	2	FL								
CNG infrastructure	2	FL								
	7	BCR & NL								
Hydrogen infrastructure	2	NL		1	1	NL	 			
Fast chargers for e-taxis	8	FL		1	FL					
	5	FL								
Fast chargers for e-busses	6	FL		1	BCR					
	2	FL								
	3	NL								
Normal chargers for e-busses	30	FL								
	11	FL								
	9	FL								
Shore power	3	FL		10	1	FL FL	5	4	FL FL	
	15	FL								 

Table 1: overview of selected projects by project call

A total of 44 projects, including 22 in project call 1, 11 in project call 2 and 11 in project call 3, were selected within BENEFIC. This equals a total of 969 different alternative charging and refuelling infrastructures. The figure below (figure 7) gives a visual overview of this by scope.

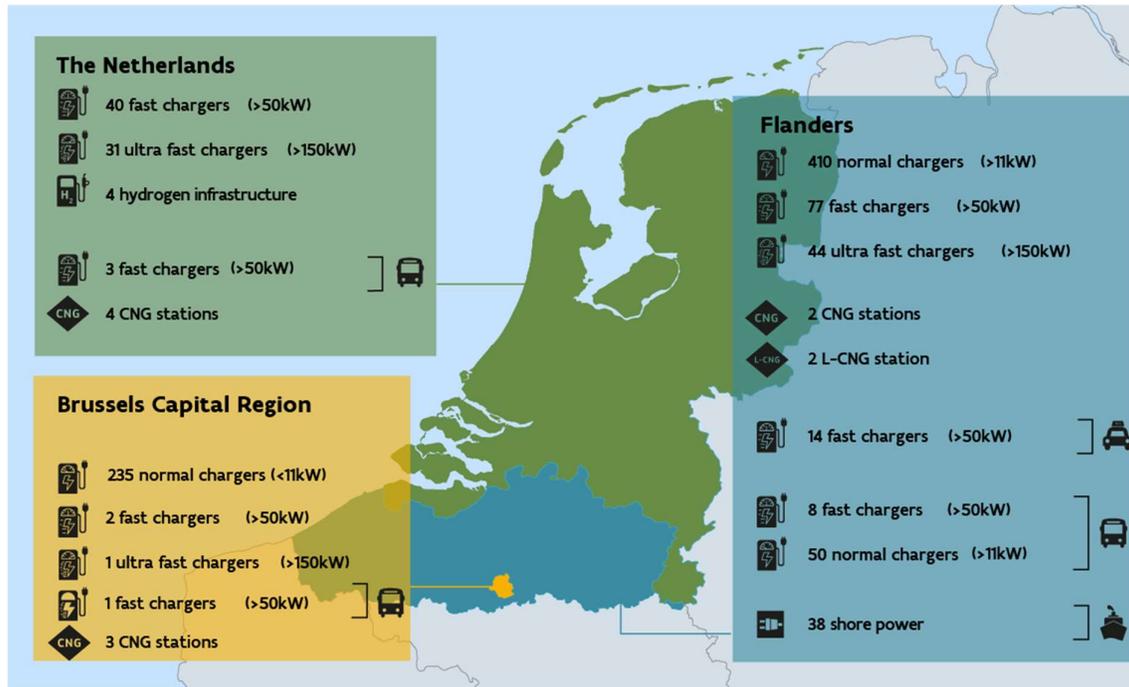
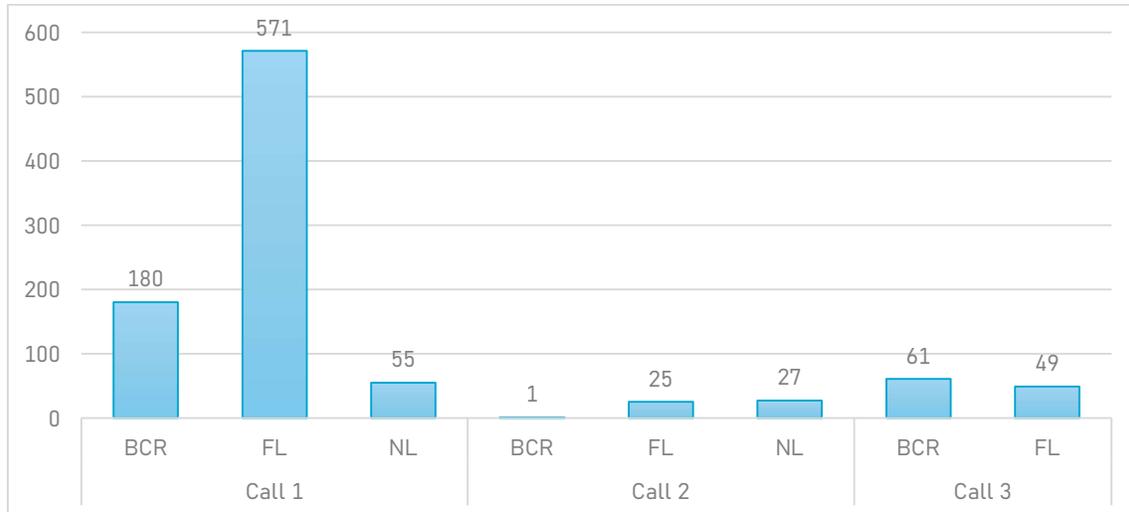


Figure 7: selected charging and refuelling infrastructures BENEFIC

Graph 3 on the next page shows the numbers of selected projects per partner and per project call. The number of charging and refuelling infrastructures selected for the 1st project call was 806, for the 2nd project call 53 and for the 3rd and final project call 110. The number of charging and refuelling infrastructures selected for Brussels Capital Region is 242, for Flanders 645 and the Netherlands 82.

Based on the data of the selected projects, the following findings can be drawn:

- The number of alternative charging and refuelling infrastructures selected was highest in the 1st project call;
- The number of alternative charging and refuelling infrastructures selected was smallest in the 2nd project call;
- Within the scope Flanders, the largest number of alternative charging and refuelling infrastructures were selected for the 1st and 3rd project calls.



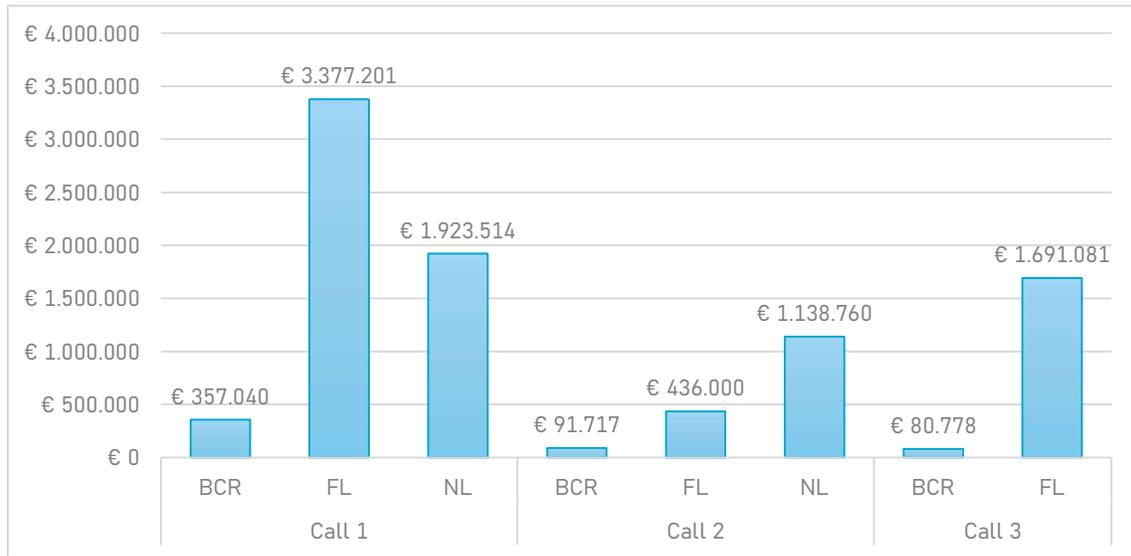
Graph 3: overview of selected charging and refuelling infrastructures by project call and scope

In the chart above, we have mainly looked at the number of infrastructures selected. It is also useful and interesting to look at the selected grant budget and how it varies by project call and by partner. A total of €9.096.091,2 grant budget was awarded across the entire BENEFIC project. This is € 11.939.853 less than the requested grant budget (see previous chapter 4.1). Note that the allocated grant budget is higher than the available grant budget as mentioned in the Grant Agreement. This is possible as the grant budget from call 3 also included 'recovered' grant budgets from discontinued and reduced projects.

The allocated grant budget for the 1st project call was €5.657.755,2, for the 2nd project call €1.666.477 and for the 3rd project call €1.771.859. The selected grant amount for BCR was € 529.535, for Flanders € 5.504.282,2 and the Netherlands € 3.062.274.

The following findings can be drawn from the graph on the next page (Graph 4):

- The allocated grant budget for alternative charging and refuelling infrastructure was highest in the 1st project call;
- The allocated grant budget for alternative charging and refuelling infrastructure was lowest for the 2nd project call ;
- Within the scope Flanders, the largest subsidy budget was allocated for the 1st and 3rd project call.
- Within the scope of the Netherlands, the largest subsidy budget was selected for the 2nd project call.



Graph 4: overview of selected grant budget according to project call and scope

5.3. REALISED INFRASTRUCTURE

44 projects out of 100 applications were selected within the BENEFIC framework. Of the 44 selected projects, 13 projects were stopped within the timeframe due to various reasons (such as not being able to obtain the infrastructure location, no final report delivered, no infrastructure realised within the BENEFIC deadline,...).

A total of 31 projects were thus realised, with 460 refuelling and charging infrastructures realised, across all BENEFIC project calls.

The figure below (Figure 8) gives a visual overview of the realised projects by scope.

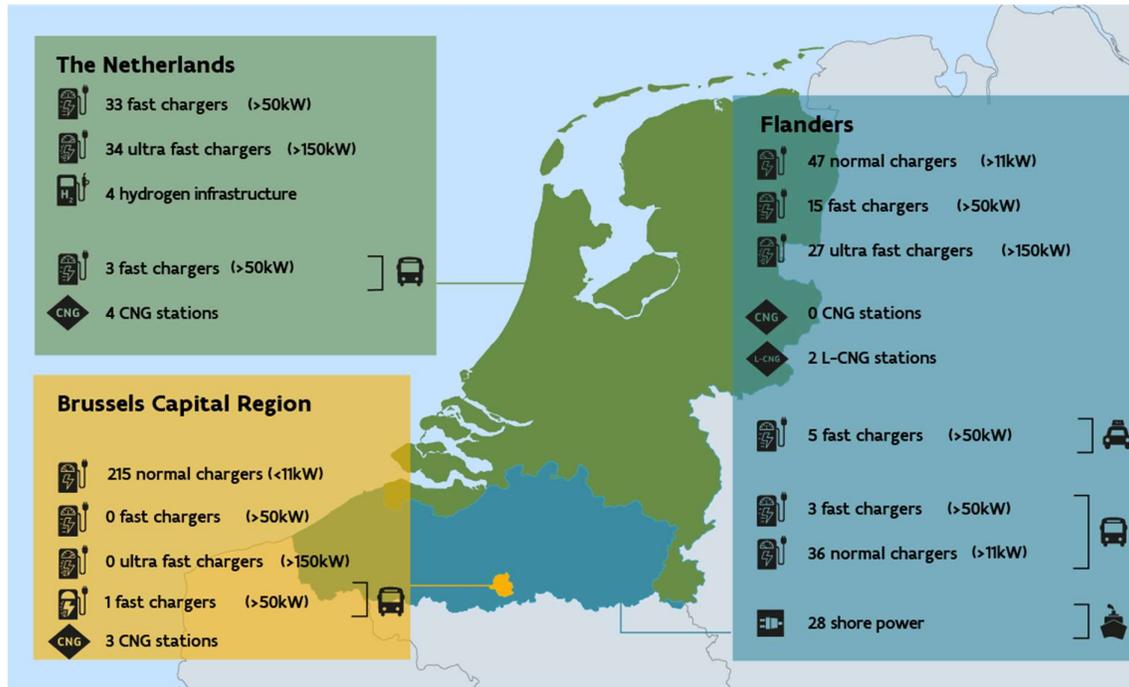
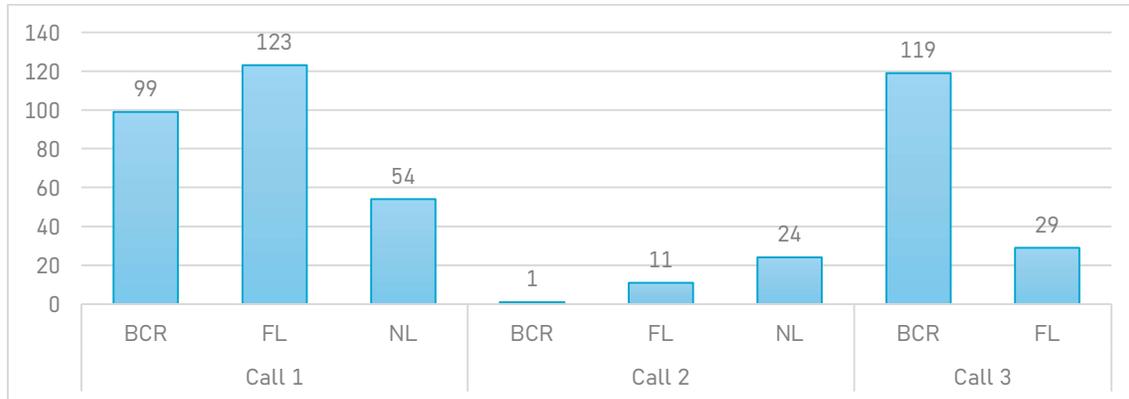


Figure 8: effectively realised charging and refuelling infrastructures BENEFIC

Graph 5 on the following page shows the numbers of realised projects by scope and project call. The number of charging and refuelling infrastructures realised for the 1st project call was 276, for the 2nd project call it was 36 and for the 3rd and final project call it was 148. The number of charging and refuelling infrastructures realised for the Brussels Capital Region application area is 219, for Flanders 163 and the Netherlands 78.

Based on the data of the realised projects, the following conclusions can be drawn:

- The number of realised alternative charging and refuelling infrastructures was highest in the 1st project call;
- The number of realised alternative charging and refuelling infrastructures was smallest in the 2nd project call;
- Within the scope Flanders, the largest number of alternative charging and refuelling infrastructures was realised for the 1st project call;
- Within the scope Brussels Capital Region, the largest number of alternative charging and refuelling infrastructures was realised for the 3rd project call.



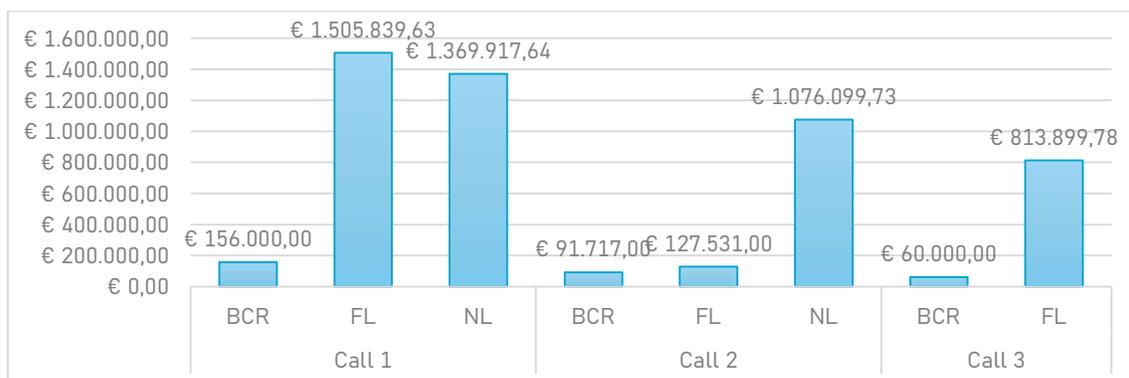
Graph 5: overview realised loading and refuelling infrastructures according to project call and scope of application

With regard to the grant budget, a total of €5.201.004,78 grant budget was realised over the whole BENEFIC project. This is €3.895.086,42 less than the selected grant budget, and €2.128.995,22 less than the total available co-financing budget in the grant agreement. In other words, 71% of the available co-financing budget was effectively realised within BENEFIC.

The realised grant budget for the 1st project call was €3.031.757,27, for the 2nd project call it was €1.295.347,73 and for the 3rd project call it was €873.899,78. The realised grant amount for the scope BCR was €307.717, for Flanders €2.447.270,41 and the Netherlands was €2.446.017,37.

From the graph below (Graph 6), the following findings can be drawn:

- The realised grant budget for alternative charging and refuelling infrastructure was highest in the 1st project call;
- The realised subsidy budget for alternative charging and refuelling infrastructure was lowest for the 3rd project call;
- Within the scope Flanders, the largest subsidy budget was realised for the 1st and 3rd project calls.
- Within the scope of the Netherlands, the largest subsidy budget was realised for the 2nd project call.



Graph 6: overview realised grant budget according to project call and scope



6. IN-DEPTH INTERVIEW RESULTS

In this chapter the results are described of the in-depth interviews conducted with a selection of grant applicants, the project partners, CINEA and the CEF team of the Flemish government.

6.1 RESULTS IN-DEPTH INTERVIEWS WITH GRANT APPLICANTS

6.1.1. SETUP

In order not to look purely at the quantitative & objective data in the field, this policy report has been supplemented with qualitative information from in-depth interviews (also called semi-structured interviews) with the relevant stakeholders such as the grant applicants. The selection of in-depth interviews was based on the projects realised, with at least 1 project from each project group and scope covered. Furthermore, it was taken into account that all categories of technologies were covered: shore power, CNG/LNG, hydrogen and electric charging infrastructure (both for electric cars, electric buses and electric taxis).

A general questionnaire was conveyed to the people to be interviewed. The answers were added in writing and then a digital in-depth interview was set up to go over the answers and pick up certain "sensitivities". This enabled us to ask "further" questions where the interviewee sometimes thought it was no longer relevant, although this could be extremely interesting information for the evaluation of BENEFIC.

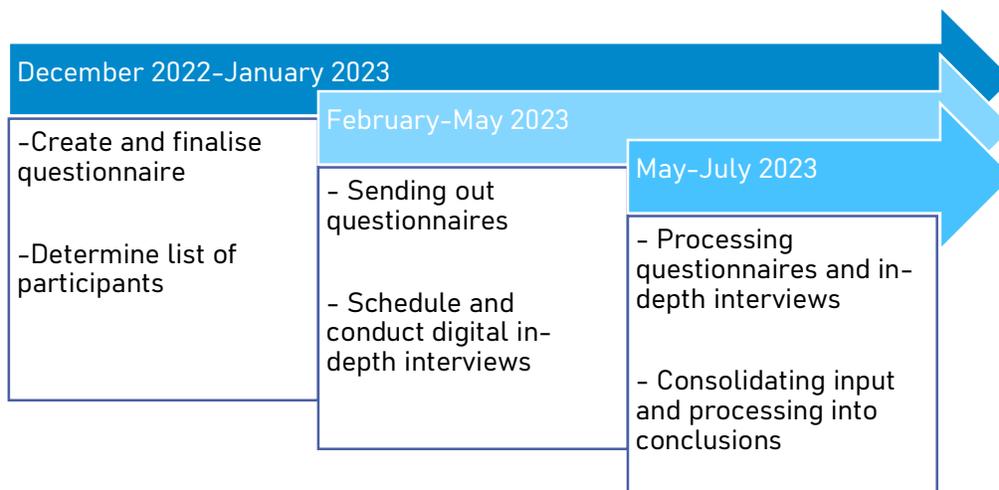


Figure 9: timeframe in-depth interviews

Digital in-depth interviews were conducted with a selection of 9 grant applicants, considering the different project calls and application areas. The table on the next page (Table 2) lists the grant applicants interviewed.



Grant applicant	Project call	Application area	Charging and refuelling infrastructure
Havenbedrijf Antwerpen	1	Flanders	Shore power
OrangeGas B.V.	1	The Netherlands	Hydrogen Electric charging infrastructure → (ultra) fast chargers
Fastned B.V.	1	The Netherlands	Electric charging infrastructure → (ultra) fast chargers
De Lijn	1	Flanders	Electric charging infrastructure → e-buses
Tankpunt B.V.	2	The Netherlands	Hydrogen
STIB-MIVB	2	BCR	Electric charging infrastructure → e-buses
Noth Sea Port Flanders N.V.	3	Flanders	Shore power
Gabriëls & Co N.V.	3	Flanders	Electric charging infrastructure → (ultra) fast chargers
Interparking N.V.	3	BCR	Electric charging infrastructure → normal chargers

Table 2: overview of grant applicants interviewed by project call, scope and category

6.1.2. METHODOLOGY: QUALITATIVE CODING

The results of the in-depth interviews were qualitatively coded⁴. This involved reducing the questions from the in-depth interviews to a particular code, in this case words/a theme. The code had to be precise and accurately summarise the main idea behind a particular question. Following codes were selected specifically for the evaluation of BENEFIC:

1. Discovery of the BENEFIC project & the call for proposals
2. Crucial factors for submitting a project proposal
3. Added value of BENEFIC in achieving ambitions
4. Experiences with drafting a project proposal
5. Experiences with the selection of projects
6. Experiences and lessons learned concerning the implementation of the project
7. Experiences with the reporting to the project team of BENEFIC
8. Difference with other grant programmes (positive + negative)
9. Cooperation with project team of BENEFIC

6.1.3. CONCLUSIONS IN-DEPTH INTERVIEWS AND QUANTITATIVE DATA GRANT APPLICANTS

The comprehensive interviews conducted with BENEFIC grant applicants have yielded valuable insights into their perceptions of the grant programme/scheme. Overall, applicants express a high level of appreciation for the BENEFIC grant, recognizing its significant contribution to the

⁴ Dingemanse, K. (2021, 26 oktober). Stappenplan om interviews te coderen | Uitleg & voorbeelden. Scribbr.



expansion of charging and refuelling infrastructures of the TENT-T network in the partner countries/regions.

Interestingly, applicants tended to discover information about BENEFIC not directly through the BENEFIC communication but rather through proactive internet searches. The decision to apply for the grant was primarily motivated by the programme's thematic alignment, favourable timing (complementing existing grants in the Netherlands), and the interesting subsidy amounts it could provide (up to 20% funding). The subsidy amount emerged as a key source of added value for grant applicants.

In terms of project preparation, opinions were divided. A majority (56%) found it to be a low-threshold, smooth, and efficient process, while a 44% perceived it as cumbersome, with a free-form approach leading to underestimations of time and workload. The selection process and communication of projects, on the other hand, was generally regarded as positive, described as good, smooth, flexible, and easy.

Challenges during project implementation were primarily attributed to external factors, such as time-consuming procedures (e.g. obtaining the appropriate permits), extended delivery times, and significant price revisions. Grant applicants generally had positive perceptions of the reporting process, although some suggested improvements in visual elements like logos, stickers, and provided texts. A few applicants found the administration to be difficult, mainly for companies for whom the roll-out of alternative charging and refuelling infrastructure was "new".

Some summarised positive and more negative elements put forward by the grant applicants are listed below (what BENEFIC distinguishes from other grant programmes):

- Positive elements:
 - **Local point of contact or liaison** from the Department of Mobility and Public Works: this way of working made it possible to submit all kinds of questions, which were answered quickly;
 - BENEFIC created the **opportunity to roll-out "small" projects**, usually grant programmes rather target the roll-out of large scale projects, with a higher minimum threshold of financing required;
 - The **flexibility** of the BENEFIC programme: the programme evolved with the market conditions, e.g. the COVID-pandemic, the difficulties with longer delivery times of electrotechnical components, ... Deadlines were extended accordingly, this was very much appreciated;
 - **High feasibility and likelihood of success of submitted projects**: the project submitters estimated the chances of approval of their project to be high, both at the submission phase as for a successful implementation;
 - The majority of the grant applicants indicated in the evaluation that **a favourable relationship was created between the administrative effort and the amount of grant obtained**;
- Negative elements:
 - From the **shore power sector** it was indicated that the **ambitions from BENEFIC were rather limited**, this could have been more ambitious according to them;
 - From the **hydrogen sector**, the message was given that the **grant amount was rather limited**, since hydrogen projects involve very high investments, so a maximum grant percentage of 20% and a maximum amount were rather perceived as too little;
 - Typical of grant projects, the **reporting and administration obligations** are **"smaller"**: **market participants** reported that the **administration was quite demanding** (rather contradictory but the "larger" parties often indicated that the administration and reporting via BENEFIC just went smoothly and was not that complex(each market party has a different view on this));



- Overall, it was indicated that the **grant amounts** (and their conditions: max. 20% and a maximum amount per technology) were **limited compared to other grant programmes**.

Despite these variations, collaboration with the BENEFIC project team was consistently praised. Grant applicants noted smooth communication, openness, and transparency throughout the process.

Importantly, the size of the applicant's company emerged as a factor influencing their experience with BENEFIC reporting, with smaller companies finding it more challenging compared to larger counterparts who often benefited from experienced advisers' assistance.

6.2 RESULTS IN-DEPTH INTERVIEWS CINEA & CEF TEAM FLEMISH GOVERNMENT

6.2.1. SETUP

Besides collecting feedback and input from the grant applicants, it was also very relevant to involve the CEF team from the Flemish government and the European grant provider CINEA, through in-depth interviews. This way, we could integrate their input and findings from the BENEFIC project into the conclusions and policy recommendations.

A tailor-made questionnaire was again prepared for these in-depth interviews; it was sent out in advance to the interviewees. During the interviews, this questionnaire was used as a guide for the conversation.

6.2.2. METHODOLOGY: QUALITATIVE CODING

The method of qualitative coding was also used to process this retrieved input through the questionnaire and interviews. Here, the following codes were used:

1. Cooperation between the stakeholders
2. The course of the project and the lessons learned
3. Findings of the realisations through BENEFIC
4. Content-related obstacles
5. Relationship of BENEFIC to other grant programmes
6. Role of the Grant Scheme
7. Role of the public authorities
8. Commitment to future funding and grant programmes
9. Embedding in current and announced funding programmes and in regulation and national policy frameworks of this Grant Scheme

6.2.3. CONCLUSIONS IN-DEPTH INTERVIEWS AND QUANTITATIVE DATA FROM CINEA & CEF TEAM FLEMISH GOVERNMENT

The comprehensive in-depth interviews conducted with CINEA and the Flemish CEF team have resulted in an overall positive assessment of the collaboration, process, and experience. Both CINEA and the Flemish CEF team express satisfaction with the cooperation, characterizing it as positive, and deem the process and lessons learned to be both constructive and transparent.

In terms of stakeholder cooperation and project management, it was indicated that everyone was easily approachable and interacted in an open and constructive manner.

While the implemented projects are acknowledged as effective, CINEA and the Flemish CEF team highlight the challenge posed by the rapidly changing technological landscape. The grant conditions (maximum percentage of 20% and maximum amount per technology) have remained the same for the 3 project calls. It was suggested that it might have been useful to evaluate these



conditions per project call and, if necessary, adjust them according to market conditions at the time of launch. This would have required more flexibility within the Grant Agreement.

Several content-related obstacles were identified, including administrative hurdles such as templates and reporting (CINEA stated in the interview that it should be more clear to project submitters in advance what the reporting requirements actually mean if their project is selected, preferably on the basis of templates provided in advance, this way the project submitters can better estimate the workload for the reporting), as well as an underestimation of timing.

A notable reflection from the Flemish CEF Team is the perceived lack of specific guidelines for Grant Schemes. The CEF team had to develop implementation strategies together with the project partners, indicating the need for clearer guidelines within the programme (specifically aimed at Grant Schemes). It was challenging to find a good balance between collecting enough information to be able to meet the requirements regarding reporting towards CINEA concerning the global project and trying to keep the administrative burden for the project promoters limited.

Despite these challenges, CINEA and the Flemish CEF team acknowledge BENEFIC's uniqueness in its extensive coverage of charging and refuelling infrastructure categories, multi-sectoral approach, focus on TEN-T, and intermodal orientation.

During the interview, CINEA indicated that in the near future there will be no new grant programme based upon a similar Grant Scheme as used in the BENEFIC project.

A notable perspective shared by CINEA is the importance of an active role for regional/local governments, emphasizing their close(r) connection to real-life and market dynamics.

6.3 RESULTS IN-DEPTH INTERVIEWS PROJECT PARTNERS

This chapter presents the results of the in-depth interviews conducted with the BENEFIC project partners, being the public authorities from Flanders, the Netherlands and the Brussels Capital Region.

6.3.1. SETUP

Besides collecting feedback and input from the grant applicants, CINEA and the Flemish CEF team, it was also highly relevant to involve the national/regional public authorities through in-depth interviews. This way, we could integrate their input and findings from the BENEFIC project into the conclusions and policy recommendations.

A tailor-made questionnaire was again prepared for these in-depth interviews; it was sent out to the interviewees in advance. During the interviews, this questionnaire was used as a guide for the conversation.

6.3.2. METHODOLOGY: QUALITATIVE CODING

The method of qualitative coding was also used to process this retrieved input through the questionnaire and interviews from the project partners. Here, the following codes were used:

1. Why cooperate with the other project partners?
2. Added value BENEFIC
3. Content-related obstacles
4. Project management process
5. Coordination with the other project partners
6. Experience with the Grant Scheme
7. Added value cooperation with national/regional government



8. Added value of the Grant Scheme and intermediary partner
9. Participation in other grant programmes?

6.3.3. CONCLUSIONS IN-DEPTH INTERVIEWS AND QUANTITATIVE DATA FROM THE PROJECT PARTNERS

The comprehensive analysis of in-depth interviews with the project partners shows that they play a central and proactive role in the implementation of alternative charging and refuelling infrastructure, making them crucial intermediaries between grant applicants and European institutions.

During the interviews, several reasons were mentioned by public authorities as to why cooperation with other partners proved so interesting:

- Alternative charging and refuelling infrastructure is a **key theme to collaborate on a larger scale** (this crosses borders);
- Already **existing partnerships** between the partners **were further strengthened** by this cooperation;
- **Very hot topic/technology** to cooperate on, all the project partners are working on the roll-out of alternative charging and refuelling infrastructure separately, so it is efficient to also **share joint experiences on the roll-out and to join forces through BENEFIC**;
- It is an **opportunity to learn about the working of a European project** by being part of a partnership. This could inspire public authorities to consider a role in future European project calls.

The project partners provided the following feedback regarding the added value of the BENEFIC-project:

- The project was initiated by the project partners themselves, allowing them to set a **common direction and ambition**;
- The focus of the roll-out was a **wide range of technology solutions**, this **fitted well within the national/regional roll-out strategies** for alternative charging and refuelling infrastructure;
- **Cross-border scope** of the project calls and the implementation of infrastructure;
- Because the **Department of Mobility and Public Works (Flemish Government) acted as the lead agency and point of contact for CINEA**, the **Brussels Capital Region and the Dutch authorities enjoyed working together on this project** with a **limited workload** from their perspective;
- The assessment and selection of projects was conducted by **making collective choices**, a **steering committee** was set up to cooperate efficiently.

Next a summary is added of the challenges and content-related obstacles experienced by the project partners:

- The **Grant Agreement** acts as a fixed agreement system, it offers **limited flexibility** to adjust and adapt according to circumstances;
- The **coordinating government** (Flemish Department of Mobility and Public Works) has to **pre-finance substantial funds**, with no guarantees as regards full compensation by CINEA after the project ends;
- Specifically for the **hydrogen technology**, the **grant conditions proved to be very limited**: max. 20% and a maximum amount per hydrogen refuelling station proved to be a restrictive factor for a large roll-out;
- The **workload** for the follow-up and coordination of the BENEFIC-project **was significant**, particularly for the Department of Mobility and Public Works;



- It remains **difficult to assess to which extent BENEFIC accelerated the roll-out** of alternative charging and refuelling infrastructure, as we've seen a huge shift in market interest for infrastructure deployment during the timeline of BENEFIC. However, as was indicated by several project beneficiaries, for a number of parties BENEFIC was crucial to step-up investments in infrastructure deployment.
- It was **not always easy to translate the conditions of CEF and of the Grant Agreement into the elaboration and preparation of the project calls**;
- The **timeframe** for the project applicants **to implement the infrastructure project was insufficient as a result of market challenges**, thankfully CINEA was flexible in adjusting the timing according to the market conditions.

The project partners' experiences with the Grant Scheme are outlined below:

- Through the Grant Scheme a **clear structure** to be followed was provided;
- Through the Grant Scheme, it was **“easier” for smaller market players to participate in the project calls** and the **chance of success** (selection of their project) **was higher** compared to other (European) project calls (because smaller market parties cannot always participate directly in other project calls);
- Through the Grant Scheme, it was **possible to steer the spending of EU funds** by regional/national governments.

The project partners (and the Flemish Department of Mobility and Public Works as coordinator in particular) emphasises the open and smooth cooperation with CINEA within the BENEFIC-project. The cooperation in recent years has shown a lot of willingness to make BENEFIC a great and relevant project.



7. OVERALL CONCLUSIONS AND RECOMMENDATIONS BENEFIC

7.1 CONCLUSIONS OF BENEFIC

BENEFIC resulted in a **significant acceleration of the roll-out of alternative refuelling and charging infrastructure on and along the TEN-T network within the partners countries/regions**: 460 extra alternative fuel/charge points were created at 217 locations in Flanders, Brussels Capital Region and the Netherlands.

Table 3 provides an insight into the key figures of the BENEFIC-project, divided into the three project calls and a general overview.

KEY FIGURES		1 st PROJECT CALL	2 nd PROJECT CALL	3 rd PROJECT CALL	TOTAL
REQUESTED	Projects	25	24	51	100
	Infrastructure	1.178	281	1.755	3.214
	Grants	€ 6.053.783	€ 8.232.929	€ 6.749.232	€ 21.035.944
SELECTED	Projects	22	11	11	44
	Infrastructure	806	53	110	969
	Grants	€ 5.657.755	€ 1.666.477	€ 1.771.859	€ 9.096.091
REALISED	Projects	16	8	7	31
	Infrastructure	276	36	148	460
	Grants	€ 3.031.757	€ 1.295.348	€ 873.900	€ 5.201.005

Table 3: key figures BENEFIC

In this chapter the conclusions from the BENEFIC project will be structured around several key aspects: ambition versus results, project management, grant scheme evaluation and grant scheme and market effects.

7.1.1. AMBITION VERSUS RESULTS

As a first conclusion, in comparing ambitions as defined at the beginning of the project and realisations at the end, we see a mixed result across **different infrastructure categories, with some achieving fewer infrastructure points than initially envisaged, while others surpassing the initial projections.**

Notably, there has been a **remarkable market interest for ultra-fast chargers, CNG filling stations (when the grant agreement was drafted and the first call was prepared, CNG was an emerging technology with limited financial support to realise projects. In the 2nd and 3rd calls, it was decided to support only zero-emission technologies, no longer including CNG), and shore power solutions,** in comparison with the initial ambitions. In contrast, **less market interest has been observed in investments related to normal chargers and hydrogen infrastructure.** Several potential explanations are worth mentioning. Firstly, it appears that normal charging infrastructure is primarily relevant in urban nodes instead of the TEN-T network. The market seems to be prioritizing investments aligned with wider transportation networks and this roll-out also started later. Secondly, the solid business case for normal chargers may have contributed to a limited inflow of investments in comparison to other categories.

In addition, the conclusion can be made that a maximum co-funding amount of 20% of eligible investment costs is insufficient to stimulate hydrogen projects without additional funding. This is also the reason why we only received hydrogen project proposals in the Netherlands, where an additional national funding programme was already in place (by DKTI).



Furthermore, a **noticeable decline in market interest for investments in fast chargers with a capacity of 50 kW has been identified**. This trend can be attributed to a strategic shift in market focus towards future-proof solutions, particularly ultra-fast chargers with capacities exceeding 150kW. Moreover, the discrepancy between ambitions and results in the field of hydrogen infrastructure can be explained by the significant investment amounts required and the complex permitting processes involved. The complexity inherent in setting up hydrogen refuelling stations may discourage potential investors.

In conclusion, these observed trends underline the dynamics and nuanced considerations within the electric vehicle infrastructure market. In general however, **there was sufficient market interest for the BENEFIC grant scheme throughout the three open calls**.

Category/technology	Indicative ambition by BENEFIC	Achieved	Difference
Normal power charger (> 11kW)	600	262	-338
Fast charger (> 50 kW)	100	48	-52
Ultrafast charger (> 150 kW)	10	61	+51
Fast charger for e-taxis	5	5	0
Opportunity charger for e-buses	5	7	+2
Overnight charger for e-buses	50	36	-14
CNG filling station	2	7	+5
L-CNG filling station	2	2	0
Hydrogen filling station	9	4	-5
Shore power box	13	28	+15
Total	796	472	-324

Table 4: overview of ambitions versus results in amount of projects

7.1.2. PROJECT MANAGEMENT

In the **assessment of administrative workload by the grant applicants**, the collective **feedback** from all involved parties was **generally positive**. However, it is worth noting that **smaller entities**, less acquainted with external funding processes, **found aspects of administration and reporting more challenging than larger parties**.

In general, the biggest challenge for market players during project implementation clearly was **finding suitable sites/locations for infrastructure deployment**. Most of the grant applicants had to rely on third parties for locations, which caused lots of uncertainty and delays during project implementation. Furthermore, the implementation of infrastructure projects has encountered **significant challenges due to long and complicated permit procedures**. This issue is particularly common in the construction of hydrogen infrastructure, where regulations create significant obstacles to project realisation. The complexity of permitting procedures appears to be a major factor contributing to delays. Often this requires knowledge and expertise of the authorising government, which is usually not there yet.

In addition, the implementation was affected to a great extent by a number of **societal and market challenges within the timeframe of BENEFIC**, such as COVID and the globally supply chain crisis (among others linked to the Ukrainian crisis) which caused cashflow issues and lots of issues with hardware and software availability and delays in delivery times, facing large price increases throughout the project.



Despite the generally smooth collaboration with project partners, the **project coordinator experienced a notable impact**, especially given that the coordination of the project was not outsourced, although specific parts such as the preparations of the calls and (financial) reporting was outsourced.

7.1.3. GRANT SCHEME EVALUATION

The evaluation of the Grant Scheme shows that **having national/regional government partners with in-dept knowledge of the local context and challenges is a great advantage**, as it improves the effective allocation of European funds.

In addition, a **European-funded grant scheme comes with certain risks for governmental partners, particularly concerning financing**. The final European compensation is only determined after project completion and the settlement of payments to third parties. This risk is partially mitigated by the existence of prefinancing arrangements defined in the grant agreement, This financial dynamic underlines a potential challenge and uncertainty in the reimbursement process. However, a Grant Scheme with third-party financing **incentivizes local stakeholders to invest early, kick-starting activity ahead of market uptake**.

Furthermore, the BENEFIC project facilitated third-party access to European funds, providing a pathway for entities that may face barriers in applying directly to European programmes. This barrier could be attributed to factors such as the scale of the project and high administrative costs. The direct contact established with the funding entity through BENEFIC proved to be of great importance in coordinating project implementation.

It is pertinent to recognise the role of BENEFIC in promoting a **level playing field**. The implementation of open and accessible project calls has democratically enabled both large entities and smaller stakeholders to participate. This inclusiveness is reflected in the successful realisation of projects by smaller market players with a more local focus. Worth mentioning among these entities are: Gabriëls, Interparking, Boostcharge, De Lijn...

A significant **challenge** faced by authorities during the establishment of the Grant scheme was **translating EU requirements into regional open project calls**. For instance, while the TEN-T scope was a critical condition, it proved challenging to take this into account for market parties, particularly given that **many (smaller) parties lack familiarity with the European TEN-T policies and definitions**. In addition, the lack of a clear definition of urban nodes on the core network or distances from the network for infrastructure deployment in the TEN-T regulation at that time, complicated the project evaluation for the BENEFIC partners, although the maximum distances from the network for infrastructure deployment were agreed with CINEA.



Category/technology	Average grant amount spent per charging or refuelling point	Max. available grant amount via BENEFIC
Normal power charger (> 11kW)	€ 579	€ 1.000
Fast charger (> 50 kW)	€ 12.000	€ 6.000 per charge point + € 6.000 for grid connection
Ultrafast charger (> 150 kW)	€ 26.692	€ 60.000
Fast charger for e-taxis	€ 12.000	€ 6.000 per charge point + € 6.000 for grid connection
Opportunity charger for e-buses	€ 91.717	€ 130.000
Overnight charger for e-buses	€ 5.663	€ 8.000
CNG filling station	€ 57.419	€ 60.000
L-CNG filling station	€ 197.702	€ 240.000
Hydrogen filling station	€ 249.850	€ 300.000
Shore power box	€ 12.559	€ 40.000

Table 5: overview of ambitions versus results in grant amount

When comparing the average grant amounts (table 5) per category and the defined maximum grant amounts, we see a **substantial difference in the case of ultra-fast chargers, where the actual investments have fallen below initial projections. Similar observations** have been made concerning **shore power installations, revealing a significant discrepancy between the projected and actual investment amounts.**

The overall outcome of the Grant Scheme demonstrated a **balanced distribution among partners**, more or less in line with the budget proportions envisaged at the project's inception. However it should be noted that there are some differences between the project partners. These differences in grant amounts can be explained by the fact that certain technologies were rolled out in certain regions/countries. For example hydrogen refuelling stations were only implemented in the Netherlands, which has a significant impact on the grant distribution between the project partners.

7.1.4. GRANT SCHEME AND MARKET EFFECTS

The BENEFIC project effectively **created a balanced and fair platform for both public and private investments through its strategic open calls.** The project demonstrated an ability to include a diverse range of stakeholders, including entities of different sizes, existing and new participants, and those operating at both local and international levels. The consensus among these involved parties was that BENEFIC **played a central role in generating leverage for additional and prospective public as well as private investments.**

Several stakeholders, who started with infrastructure roll-out as a result of BENEFIC, continued to deploy **infrastructure beyond the project's duration.** (for example Fastned, Gabriëls, Boostcharge, ...) This underlines the continued impact of BENEFIC in stimulating ongoing investments in both public and private sectors. This demonstrates the effectiveness of the project



in not only stimulating initial infrastructure efforts, but also an ongoing development process within the broader investment landscape.

7.2 (POLICY) RECOMMENDATIONS OF BENEFIC

In the final chapter of the evaluation study, a number of (policy) recommendations are drafted which should be taken into account when setting up future grant schemes within European funding programmes.

7.2.1. A WELL-CONSIDERED DESIGN CAN INCREASE IMPACT AND EFFECTIVENESS

It is crucial to **define clear guidelines between the funding agencies and project partners** during the project's initiation phase, taking into account aspects such as financial setup, project management protocols, and reporting mechanisms.

In addition, **built-in flexibility should be included in the design of a grant scheme, anticipating on external developments and evolving market dynamics during the implementation of the scheme.**

Furthermore, it is important to **articulate clear rules of engagement for third-party investors right from the outset.** This involves explicit definition of scope, conditions, eligible investment costs, grant amounts, and expected administrative costs for project implementation and reporting. Based on the experience of BENEFIC, in particular concerning the scope, it should be recommended to define and communicate in more detail what does and does not fall in the scope, e.g. through map materials and specific guidelines.

A key point in the design of the grant scheme is defining target groups and then communicating locally and in a targeted way to reach out to them, the importance of targeted communication should not be underestimated. This strategic approach aims to enhance clarity, transparency, and optimal engagement within the framework of the grant scheme.

For future similar initiatives: **maximum grant amounts** should be looked at. The realised projects have shown us that it was very exceptional that the maximum available grant amount was reached per project. 'Reserving' a lower maximum grant amount per project provides the potential to support and realise more infrastructure. Appropriate grant amounts can be determined by working out some business cases in advance, thus understanding the "gap" in the budget.

Finally, as exemplified by BENEFIC, the involvement of a diverse range of cross-border partners and technologies enhances impact but simultaneously introduces a higher degree of complexity, which should be taken into account when considering setting up a grant scheme.

7.2.2. BROADER POLICIES AND TARGETS AS A STARTING POINT FOR GRANT SCHEME AMBITIONS

To increase impact and effectiveness, the grant scheme set-up and ambitions should be aligned with European and national policies and targets, e.g. with regard to infrastructure deployment.

The focus for **next generation project calls or grant programmes** should be **focused on zero-emission technologies only.** This recommendation is, in general, in line with the European vision and strategy for zero-emission transportation and mobility. The next generation project call or grant programmes can be used in the area of other types of transport such as, for example, **heavy duty transport** where the asset is to work across borders or on **underground structures** for creating greater connectivity or **providing storage and discharge network** (smart grid utilisation). In this sense, digitalisation, transport and energy should be approached even more synergetic (within project calls) as these are integrally connected for future infrastructure deployment.

7.2.3. ESTABLISH A CROSS-BORDER LEARNING NETWORK

Creating a **collaborative learning network involving all stakeholders** in a grant scheme is crucial. This network serves as a platform to collectively address and overcome technical and legislative



challenges encountered during implementation. The exchange of experiences and insights stimulates mutual learning and enhances problem-solving capabilities.

7.2.4. TARGET SPECIFIC AREAS FOR INVESTMENT SUPPORT

Future grant schemes should **strategically focus on specific transport sectors where investment support for “greening” is critically needed**, such as **heavy-duty transport and logistics**, as mentioned earlier. Great steps have been taken in recent years in “greening” the passenger car fleet and the supply of infrastructure across the TEN-T network, among others as a result of BENEFIC. Currently, a shift is noticeable in the zero-emission transition challenge: more logistics and heavy-duty market parties are taking the first steps towards electrification. In addition, investments in infrastructure solutions for logistics and heavy-duty will be a lot bigger in comparison with infrastructure for light-duty vehicles, therefore the need for financial support will be relevant on the short term. Future grant schemes therefore should direct financial assistance towards areas that can benefit the most, maximizing the impact of the grant scheme.

7.2.5 ENSURE COMPLEMENTARITY WITH NATIONAL AND REGIONAL CALLS

European funded grant schemes should be **designed to complement, rather than duplicate, national or regional project calls**. Incorporating cross-border cooperation and aligning the scope with the Trans-European Transport Network (TEN-T) can enhance the scheme's effectiveness. Defining leading cross-border grant scheme projects, such as a possible 'e-route du soleil' from the North of the Netherlands to the South of France, or other corridor projects, can create visibility and serve as models for other regions.

7.2.6 CONSIDER ADDITIONAL SERVICES BEYOND FINANCIAL SUPPORT

Reflecting on whether grant schemes should extend beyond financial support to include additional services is crucial. **Providing support in the selection of locations**, particularly challenging for heavy-duty transport infrastructure deployment, **can be a valuable inclusion**. This acknowledges the multifaceted challenges involved in the implementation process.

The abovementioned recommendations collectively aim to enhance the efficiency, impact, and adaptability of grant schemes, ensuring they align with the evolving needs of the sectors. They support and contribute to broader objectives such as cross-border collaboration and sustainable transportation development.

The value of programmes like BENEFIC lies in their contribution to technological breakthroughs and the facilitation of innovations with substantial societal benefits.

In conclusion, BENEFIC can be described as a clear and compelling example of how strategic public investments, despite their complexity and associated costs, play an important role in steering the market towards the embrace of new technologies. By actively addressing challenges and fostering collaboration, programmes of this nature become instrumental drivers of innovation, ultimately shaping the trajectory of technological advancement and its positive impact on society.



Colophon

This is a publication of:

Flemish government

Department of Mobility and
Public Works

Policy Division

Layout and editing:

The New Drive
Samen België schöner maken



STERK INNOVATIEWERK