ENTRANCE

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Edgar Valverde (PNO)	Format check
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LIST OF ABBREVIATIONS AND DEFINITIONS

Abbreviation	Definition
AI	Artificial Intelligence
CPC	Cooperative Patent Classification
DoA	Description of Action
EBRD	European Bank for Reconstruction and Development
EC	European Commission
EIB	European Investment Bank
EIF	European Investment Fund
H2020	Horizon 2020
ICT	Information and Communications Technology
MIPM	Market and Innovation Positioning Map
ML	Machine Learning
MPM	Market Positioning Map or Stakeholder Positioning Map (Can also be referred as MIPM, see below).
NB	Nota Bene
OEM	Original Equipment Manufacturer
PCP	Pre-Commercial Procurement
PPI	Public Procurement of Innovative Solutions
R&D&I	Research and Development and Innovation (also referred as RDI)
RTOs	Research and Technology Organisations
SME	Small and Medium Enterprise
T&M	Transport & Mobility
TRLs	Technology Readiness Levels
VC	Venture Capital

Short name and name of beneficiaries

Short name	Name
CIAOTECH*	Ciaotech Srl
PNO ES*	PNO Innovation S.L. (third party of CIAOTECH)
ALICE	Alliance for Logistics Innovation through Collaboration in Europe
CFH	CrowdfundingHub BV
IWT	European Inland Waterway Transport Platform

* CIAOTECH and PNO ES are both parts of PNO group. The content of this deliverable sometimes refers to "PNO group" or “PNO” intended as both companies.

1. EXECUTIVE SUMMARY

ENTRANCE will offer a unique EU online Matchmaking platform for the entire European transport and mobility landscape. The ENTRANCE platform is expected to be the legitimate matchmaking platform for innovators in the transport and mobility sector as it will bridge the gap of finance towards the market for such innovative solutions. The platform will:

- connect a critical mass of relevant stakeholders from the "supply-demand-finance" triangle in the entire transport and mobility sector, including all transport means and modes,
- create an increased visibility of "first-of-a-kind" transport solutions, foreseen replacement plans and schedules of major buyers and public and private financing opportunities, and
- do an automatic matchmaking that will facilitate the scale up, market uptake, and access to finance.

In order to identify and attract the most innovative and active organisations as users of the platform to boost their uptake and upscaling and, at the same time, attract further stakeholders to the platform, this report contains insights about the key players in the recent years for decarbonising the transport and mobility sector of goods and passengers.

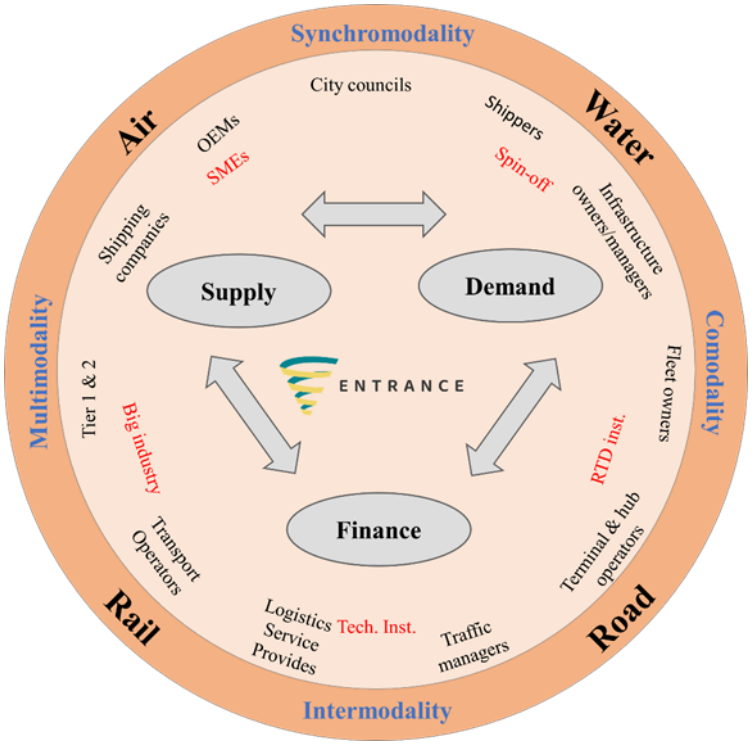

Figure 1: The ENTRANCE concept focus.

The information about these relevant stakeholders will be used during the project to attract best practices and relevant European stakeholders to the ENTRANCE community, through dedicated communication tools or by adapting the messages according to the market trends.

This report has been built using the same 'taxonomy' -categorisation by key concepts in different levels- that has been used to develop the ENTRANCE platform. This means that this document presents a seamless organisation towards the actual ENTRANCE community.

The different stakeholders have been identified through desk research and by using dedicated tools, owned by PNO group, that have been organised not only by using the adapted ENTRANCE taxonomy, but also by linking such profiles with the main profiles of the ENTRANCE "supply-demand-finance" triangle.

In addition to this, to cover all the aspects that will feed the platform, this report also provides a glance of financing opportunities available at EU level, including the main definitions to consider and a high-level guidance to understand how to attract funding for innovative solutions. This information complements the entities that have been identified as investors during the stakeholder assessment (under the finance pillar).

This document may be updated on a continuous manner during the execution of the project so that it reflects all new identified stakeholders.

2. INTRODUCTION

This report on identified supply, demand and financing opportunities for feeding the ENTRANCE platform is based on a clear methodology created by PNO group. This methodology focuses on the identification of key stakeholders according to an innovation scoreboard of projects and patents that is part of the already mentioned methodology. This assessment is complemented with an identification of the key concept and the main financing opportunities that will complement the investors present on the ENTRANCE platform.

The report provides a clear description of the methodology used in section 3, to allow a clear understanding of how the information has been collected and how the main findings are organised. An analysis of public-funded project has been carried out to identify these key stakeholders for the ENTRANCE community, section 4 highlights such funding sources and the main financing opportunities.

Section 5 provides the main findings of the assessment that has been caried out, including the linkage of such findings with the main profiles of the ENTRANCE platform. On the other hand, section 6 organises such information by delivering position maps to understand better which players can cover which role under each transport mode and solution category.

The annex to this document provides the main boundaries used for the search involved in this analysis, the exhaustive list of projects analysed, and the overall list of entities identified during this assessment.

3. ENTRANCE IDENTIFICATION OF OPPORTUNITIES: METHODOLOGY AND SCOPE

3.1. SCOPE OF THE ASSESSMENT AND OVERVIEW OF THE WORK DONE

This assessment in the framework of the ENTRANCE project has the aim of finding and selecting a high number of actors and financing opportunities which operate in the transport and mobility sector and contribute on lowering the environmental impact of this sector.

The aim is to bring some of these actors to the ENTRANCE platform in order to help bridging the funding gap for technology providers, by reaching potential buyers and both public and private investors.

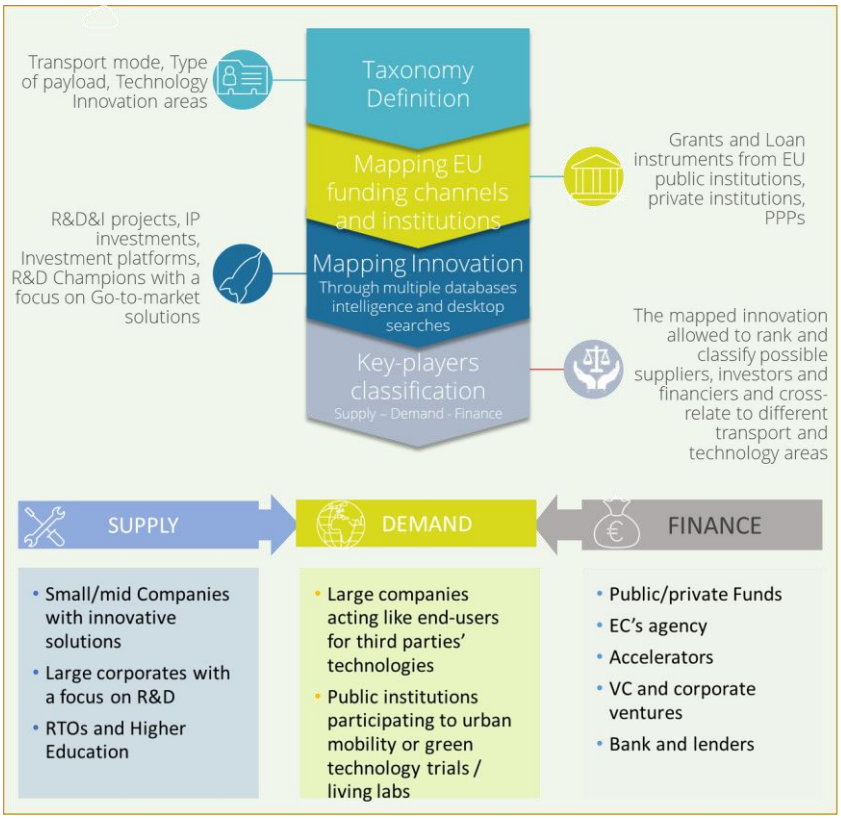

Figure 2: Snapshot of the process for this assessment.

All the players identified are split in three categories, being in line with the profiles already identified for the platform: **supply**, **demand** and **finance** (see Figure 2).

To identify the stakeholders, an original PNO's methodology has been customised, mixing a technology search based on an innovation scoreboard of projects & patents with a complementary desktop analysis, according to the methodology described in the following section. In this regard, after the analysis that leads to the identification of the individual stakeholders, an overview is made of the ecosystem of networks, projects and partnerships identified that can favour the matchmaking between supply, demand and financing, with a focus on public procurement.

The assessment of financing programmes includes exclusively the identification of the opportunities specific matches will be integrated through the platform and matched with user according to detailed descriptions of the funding opportunities.

3.2. TAXONOMY DEFINITION

Taxonomy Definition

All possible modes of transport have been considered, both passengers and goods, and any type of vehicle. A specific taxonomy was defined and acknowledged by the ENTRANCE partners for technologies and transport modes.

In compliance to the ENTRANCE platform, all possible modes of transport were considered, both passengers and goods, and any type of vehicle. A specific taxonomy was defined and acknowledged by the ENTRANCE consortium for technologies, stakeholders' classification and transport modes

The adopted classification is reported in Table 1 and Table 2, which show the simplified *transport areas* and the *technology classification* used to tag the expertise of different organisations and to analyse different projects. For all of them, *passenger*, *freight* and *public transport* have been considered.

If an organization is involved or provides services for more than one of the macro areas or "what" categories just mentioned, it is classified as *multiple* mode of transport or type of what is transported. *Other technologies* can include -e.g.- the use of scrubbers to reduce NOx and SOx emissions), actions (e.g. upgrading of infrastructure to favour the multimodality) engineering design (e.g. improvement of aerodynamics or new powertrain conceptions) or monitoring of pollution and emissions.

Table 1: Transport type classification in ENTRANCE

TRANSPORT SECTOR	
Level 1	**Level 2**
RAIL TRANSPORT	Passenger Rail Transport (Interurban)
	Freight Rail Transport
	Rail vehicles
ROAD TRANSPORT	Freight transport services by road
	Public passenger transport by road
	Interurban scheduled road transport
	Road vehicles, including urban passenger vehicles and cars and public transport and commercial road
WATERBORNE TRANSPORT	Inland passenger water transport
	Inland freight water transport
	Sea and coastal passenger water transport - Short Sea Shipping
	Sea freight/Ocean freight - Deepsea
	Waterborne vessels
AIR TRANSPORT	Passenger Air Transport
	Freight Air Transport
	Air transport vehicles, including Unmanned Aerial Vehicle (UAV)
MODALITY	Combined transport
	Multimodality (*Combined Transport*.)
	Intermodality (*Transportation of freight in an intermodal container or vehicle)*
	Synchromodality (*Evolution of inter- and co- modal transport concepts)*
	Co-modality
	Urban Logistics - Distribution
	Urban Mobility

Table 2: Technology definitions in ENTRANCE.

TECHNOLOGY CLASSIFICATION	
Alternative fuels and vehicles	Alternative fuel
	Alternative fuel re-fuelling infrastructure
	Fuel cell system
	Hydrogen infrastructure

	Vehicle propulsion, Fuel cell electric vehicle (FCEV)
	Vehicle propulsion, Fuel cell vehicle (FCV)
Digitalisation	5G
	Advanced Driver Assistance System
	Artificial Intelligence (AI)
	Big Data
	Blockchain
	Collaborative or digital platform - connectivity platforms
	Cooperative, Connected and Automated Mobility (CCAM)
	Decision Support System
	Internet of Things (IoT)
Electrification (regarding the technologies that help boosting electromobility or the electrification of railways as well)	Batteries
	Vehicle power/re-charging systems, operations and infrastructure
	Vehicle propulsion, Battery electric vehicle (BEV)
	Vehicle to Grid (V2G)
Innovative Materials	Innovative Materials
Management Systems (technologies that help to develop fleet or traffic management, comprising ICT tools as AI, ML…)	Infrastructure management system
	Intelligent port systems
	Intelligent Transport Systems (ITS)
Smart solutions	Boxes
	Combined passengers and goods delivery
	Container
	Load carriers
	Load Units
	Pallet
	Parking management
	Transport crate
	Urban delivery solutions
Transport & logistics operations	Aircraft operations
	Cargo handling
	Cargo pooling
	Carpooling
	Corridor management
	Intelligent ports, terminals and hubs
	Logistics as a service (LaaS)
	Logistics nodes management
	Mobility as a Service (MaaS)
	Multimodal hub and network solution
	Physical Internet
	Pipeline as a Service (PaaS)
	Routing
	Smart contracts
	Systems and Technologies for Interconnected Logistics
	Transport Management Information System
Vehicle design	Aircraft propulsion
	Autonomous and semi-autonomous sailing
	Cabin and cockpit design
	Other green vehicles, including cargo bike, etc.
	Rail vehicle design
	Ship design

	Ship/vessel wheelhouse
	Transport infrastructure equipment/machinery, including cranes, etc.
	Unmanned vehicle
Vehicle technology	Delivery Robots
	Platooning
	Power train technology
	Rail control systems
Others	Other (e.g. Scrubbers))
	Resilience
	Safety system

3.3. INNOVATION FINANCING PROGRAMMES

Bridging the gap for financing innovation is one of the main challenges for a company aiming to scale-up or grow. To this purpose, ENTRANCE is mapping EU's major types of programmes addressing the Transport and Mobility sector, alongside all those financing bodies with a focus on sustainability

Information about private and public financiers has been identified and collected. The main financing programmes have been described in section 4 while more than 220 financiers all around EU-27 and outside have been mapped in section 5. While sustainable finance is increasing, mobility is backed up by many corporate ventures by main OEMs. Early-stage finance is well represented too, from VCs to business angels to grants.

The considered **public investors** are *national bodies* and *European institutions* (e.g. EC and EIB); the **private investors** are usually *large companies with a corporate venture capital*, *private funds*, *venture capital and business angels* and *private banks and investment companies*; finally the **public-private investors** are represented by co-participated *funds* and *accelerators*. They have been selected and classified based on the ownership (public, private or a hybrid of the two) and the addressed beneficiaries (start-up, small-cap, mid-cap or consortia).

The following figure provides a summary of the framework for financing innovation and the landscape of how it is organised at international level:

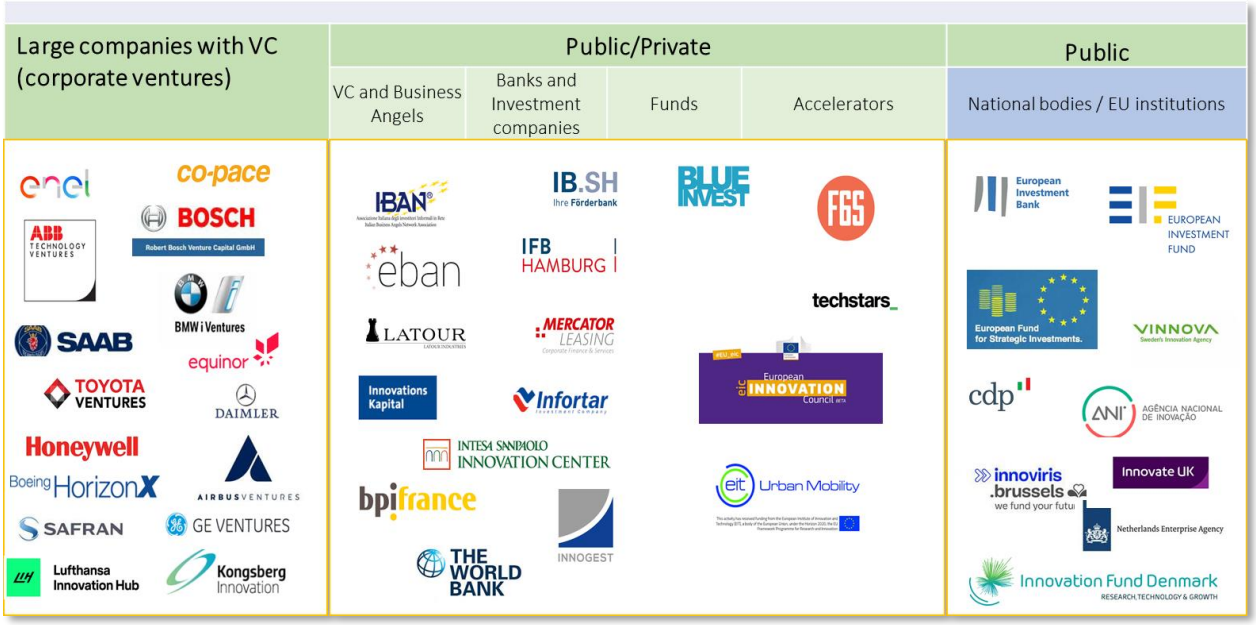

Figure 3: Financiers mapping (Partial extract of the results, for illustrative purposes only).

With regards of innovation financing programmes, their identification has started with a clear definition of the criteria to select these opportunities. The following aspects have been considered:

- ***Outreach***: European. This selection has been done considering the possibility of providing the same opportunities to entities or individuals throughout Europe. Including funding from local to national authorities would enlarge the list of specific entities from a certain country.
- ***Scope*****:** Transportation or mobility solutions scale-up or implementation, including also support for investment in advanced technologies.
- ***Technology Readiness Level (TRL):*** ENTRANCE platform will provide support to near to the market innovative solution that need to bridge the gap of financing to reach the market. It has been considered that funding opportunities from TRL6 [1] responds to the expectations of future ENTRANCE platform users.

It is important to mention here that the information collected and listed has been gathered from public sources with the utmost care and updated when creating this deliverable. However, this assessment responds only to the objective of the ENTRANCE project for identifying financing opportunities and shall not be considered as a financial advisory service by any party accessing to this document.

[1] Technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies).

3.4. SEARCHING FOR INNOVATION ECOSYSTEMS

After the identification of public programmes supporting the road-to-market of sustainable transport solutions, more than 2000 interesting stakeholders have been identified. They were spotted by mixing ***(i)*** *a technology intelligence and stakeholder analysis on PNO's proprietary databases of R&D&I funded projects and patents and* ***(ii)*** *desktop research on multiple public databases*

The initial steps allowed to rebuild a large ecosystem, while a second step consisted in categorizing it according to ENTRANCE's specific taxonomies (Chapter 5). Finally, the specific PNO's *Market & Innovation Positioning Maps* © have been adapted to the ENTRANCE scope to concretely highlight specific key-players (Chapter 6).

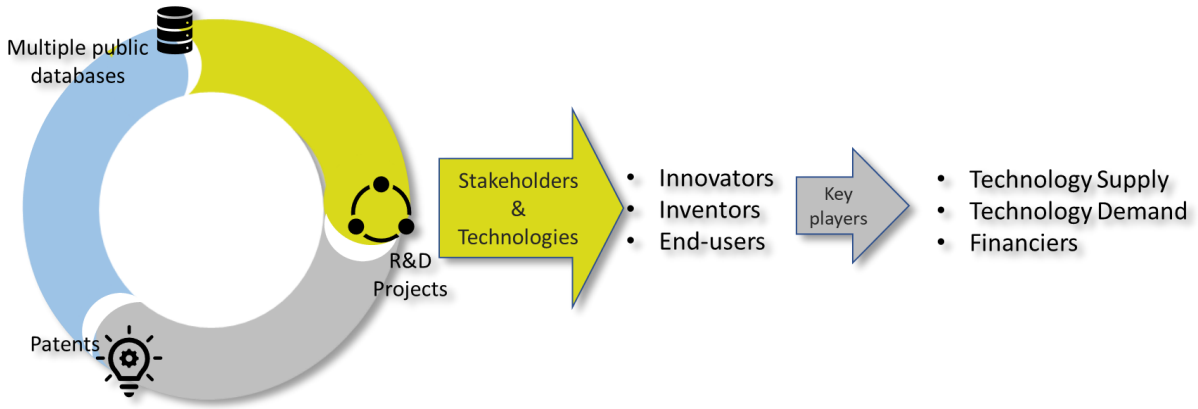

Figure 4: Overview of the Innovators mapping.

3.4.1. Organisations selection

More in detail, once the interesting projects and patents were identified[2], all the participating organisations / relevant-patents applicants have been analysed and evaluated considering the potential interest to join the ENTRANCE platform. The selected organisations have been first divided in supply, demand or finance (most of them can cover more roles as has been already identified in proposal stage and early execution stages) and have then been classified per typology, mode of transport and per type of technology (under development or for which there is an interest). Financiers have been instead classified based on their area of intervention.

The last brick consisted of performing a desktop analysis through various websites and databases of companies and entities active in the transport sector. The websites and databases have been chosen considering various accelerator platforms or EC-linked sources to bring out the most active and innovative

[2] See more details in the Annex 1.

organisations in proposing and financing state-of-the-art technologies in the transport sector at European level. The sources included are listed and described below in Table 3.

Eventually, the considered typology of organisations includes:

- Start-ups (companies with less than 5 years of activity excluding joint ventures);
- SMEs (companies with less than 250 employees);
- Large companies (companies with more than 250 employees);
- Universities;
- RTOs;
- Public bodies (this category embraces also port authorities);
- Municipalities (cities, counties and regions);
- Infrastructures (ports, air ports, hubs, etc.).

Table 3: Desktop search sources.

Innovations databases	
Seal of Excellence - Access2EIC	The Seal of Excellence is a quality label awarded to project proposals submitted to Horizon 2020 which succeeded a highly competitive evaluation process by independent experts but did not receive funding due to budget limits.
Euroquity - Companies	Created by Bpifrance in 2008, EuroQuity is an online matchmaking platform that helps companies meet investors and partners.
Euroquity - Investors	Created by Bpifrance in 2008, EuroQuity is an online matchmaking platform that helps companies meet investors and partners.
InvestHorizon	InvestHorizon is a programme financed by the European Commission, in association with Eureka, to facilitate series A funding for selected deep tech companies boosting their investment readiness and investor relations. The programme is run by a consortium coordinated by Tech Tour. InvestHorizon Accelerator offers FREE services to raise the investment readiness of SMEs from EU, Horizon2020 and EUREKA countries.
EIT Urban Mobility Accelerator	The EIT Urban Mobility Accelerator is an EU-funded programme in five European regional hubs implemented through partners to take early-stage mobility start-ups to the next level. They are looking for early-stage start-up teams with business ideas that reduce congestion and increase efficiency in the transport system.
EIT InnoEnergy Start-ups Portfolio	EIT InnoEnergy brings people and resources together, catalysing and accelerating the energy transition.
EIT Climate-KIC Start-ups	Climate-KIC is Europe's largest public-private innovation partnership focused on climate innovation to mitigate and adapt to climate change.
EIT Digital Accelerator	EIT Digital is a leading European digital innovation and entrepreneurial education organisation driving Europe's digital transformation. It works as accelerator also for start-ups operating in transport and mobility sector.
EU-Startups Database	Database of European Start-ups.

Horizon Results Platform	EU-funded projects results platform in which technology developers can be matched with policy makers, investors or potential buyers.
Innovation Radar	The Innovation Radar is a European Commission initiative to identify high potential innovations and innovators in EU-funded research and innovation projects.

3.5. INTRODUCTION TO THE STAKEHOLDERS POSITIONING MAP

Market & Innovation Positioning Map © (MIPM) - PNO has been defining its own 4-quadrants matrix in the last 8 years. It is presented below. Its advantage is that it is built in such a way to particularly:

1) Define the general framework of noticeable companies working on a particular technology topic

2) Evidence those key – smaller/emerging - players with a very specific knowledge on the analysis subject matter.

The analysis is intended to be qualitative, but based on a quantitative weighted measurement of a mixed scoreboard. More in detail,

- ***Innovation Vision and Specific Knowledge (x-axis)*** – This takes into account both the R&D capacity in the field (including funding and IP) and a specific Affinity Index which weights the proximity to the specific project technology at the centre of the analysis (NOTE that in this case the Affinity was also defined by considering TRL)

- ***Investing Capacity (y-axis)*** – This considers the capacity and structure to invest (e.g. turnover), including the nature of the organisation.

From the bottom to the top, the organisations with growing investing capacity are positioned. Going from the left to the right instead, the organisations with increased specific domain knowledge and innovation can be found. The upper-right quadrant defines organisations most likely to be market incumbents, whilst in the lower-right one relevant technology providers or visionaries can be found, with most specific knowledge with respect to the analysed topic.

The MIPM can identify the "position" of an organisation with respect to the investment capacity and readiness on products and technologies which -in the case of ENTRANCE project- sums to the requirement of lowering emissions in transport and mobility sector, according to ENTRACE's objectives. In the following, several Stakeholder Positioning Maps are reported, according to PNO's criteria to highlight the most relevant organisations in each mode of transport for each type of technology area.

4. INNOVATION FINANCING PROGRAMMES

As introduced in the methodology section, the financing programmes framework available for innovative solutions to approach the market is wide and can be divided among different categories. These categories have been organised according to the typology of support that ENTRANCE platform users could need:

4.1. EQUITY

Equity describes the ownership of assets of the company so when a company decides to expand its equity through external sources it is selling a part of the company to fund its own activity usually for expansion phases. By investing through equity mechanisms in a company the risk of the investment is linked to the company's success: the company assets are liquidated shareholders would receive the resultant money after paying company's debt.

In addition to this, there is also a mechanism called 'quasi equity' that combines the characteristics of equity and debt (see section 4.3).

While specific private entities supporting initiatives through funding will be identified during the upcoming sections of this assessment, the main public references with regards of public supported equity or quasi-equity are the following:

- European Investment Bank (EIB) Venture Debt mechanism.
- European Investment Fund (EIF) through the COSME Equity Facility for Growth or InnovFin Equity mechanisms.

4.2. GUARANTEES

Guarantees supports both the disruptive suppliers of solutions and the investors in such initiatives as cover the risk in case it is not possible for the borrower to repay the debt at the end of a certain loan agreement.

There are three main forms of guarantees:

- *Personnel*: Personnel assets are included for repaying debts not legally protected from creditors.
- *Collateral*: A particular assets pledged for securing the debt.

The *Lien* is the legal mechanism for a creditor to hold the collateral in case it is not possible to pay a debt.

At EU level, the most relevant references that can be listed in this assessment are the ones managed by EIF through financial intermediaries. These mechanisms are the following:

- COSME – Loan Guarantee Facility.
- EaSI Guarantee.

- InnovFin SME Guarantee Facility.

4.3. DEBT

Debt refers to an acquired liability with another party that shall be returned according to an agreed calendar and with a certain cost associated. Main financing alternatives that can be listed here are the following:

- *Loans* – Short- and long-term funds that provide liquid assets to the company directly related with the financial structure and potentially linked to guarantees.
- *Bonds* – Financing alternative that allows the attraction on capital with a long-term basis.

This kind of support can be articulated from both the public and private sector:

- *Public funding* – There are also debt alternatives from public authorities through public banks at different levels. These alternatives play a key role on providing support for materialisation of public policies. At European level, it is possible to list the following entities:
    - EIB – Focused on large scale loans for the public and private sector to deploy solutions in accordance to EU taxonomy for sustainable activities. EIB manages also the activities of InnovFin, that are also relevant to mention as it channels support for private funding facilitators in line with the EIF that will be described in upcoming sections.
    - European Bank for Reconstruction and Development (EBRD) – Oriented to supporting economies and promoting private and entrepreneurial initiatives.
- *Private funding* – Conventional funding opportunities from the banking community.

4.4. GRANTS AND SUBSIDIES

Grants and subsidies can be understood as -in principle- non-reimbursable support from governments (the grantor bodies) to specific institutions according to a specific objective:

- Grants respond to direct support to actions in line with policy objectives of EU.
- Subsidies responds to the intention of influencing the market.

Intensity of funding received can vary depending on:

- Typology of project.
- Typology of beneficiary (the entity or group of entities receiving a grant).
- Thematic priority.
- Size of the investment or the proposed action.

- The associated risk to the proposed actions.
- Compliance with the requested actions by the grantor body.

The main European funding opportunities that can be listed for this assessment are the following:

- **CEF** (Connecting Europe Facility) Digital, Telecom and Transport.
- **COSME** (Competitiveness of enterprises and Small and Medium-sized Enterprises).
- **Digital Europe Programme**.
- **EIC Accelerator** (previously SME Instrument).
- **EuroStars** and other programmes managed by Eureka.
- **European Structural and Investment Funds** (ESIF).
- **European Urban Initiative** (EUI).
- **Horizon Europe** – Innovation Actions under Cluster 5 (specific destinations under the work programme).
- **Interreg Europe** and other cross-border cooperation programmes.
- **JPI Urban Europe**.
- **LIFE** Programme (EUs financial instrument supporting environmental and nature conservation projects).
- **NextGenerationEU** funds.

4.5. PRE-COMMERCIAL PROCUREMENT (PCP)

Pre-commercial procurement (PCP) is an approach to public procurement of research and development (R&D) services. It is an important tool to stimulate innovation as it enables the public sector to steer the development of new solutions directly towards its needs.

In PCP, public procurers buy R&D from several competing suppliers in parallel to compare alternative solution approaches and identify the best value for money solutions that the market can deliver to address their needs. R&D is split into phases (solution design, prototyping, original development and validation/testing of a limited set of first products) with the number of competing R&D providers being reduced after each R&D phase.

PCP can go up to the development and the purchase of a limited volume of first products or services, but excludes quantity production and large scale commercialisation.

Information retrieved from official EC sources (European Commission, 2021).

4.6. PUBLIC PROCUREMENT OF INNOVATIVE SOLUTIONS (PPI)

Innovation procurement can refer to:

- Buying the innovation process (RDI services) and part of the outcomes.

- Buying the outcomes of innovation.

It is a market driven demand where public buyers act as early adopter and promotes business and researchers to develop the innovative products/services/processes that meet the need.

It is also interesting for public buyers as it enables similar or even better results at optimised costs from currently available solutions.

Information retrieved from official EC sources (European Commission, 2021)

4.7. ALTERNATIVE FINANCING SOLUTIONS

The alternative finance ecosystem can be used by any person or organisation to explore the funding landscape. The needs of those seeking financing are always the starting point. This ecosystem aims to better define what types of financing are suitable options. There are two main starting points to orient these that do not acknowledge the landscape of alternative financing solutions:

- Funding may come from: institutions, crowds and communities.
- There are different financing models to organise the investments: donating, reward seeking, investing and lending.

The following tables summarise the main aspects of these starting points:

Table 4: Origin of the sources in the alternative financing landscape.

	Financing sources	Description
1	Community funding (E)	Investors know each other directly or indirectly, are engaged and share a common goal or place
2	Crowdfunding (F)	Small amounts of money are raised from large amounts of people to fund something.
3	Institutional funding (G)	Investors invest indirectly through institutions, seeking profit and/or impact.

Table 5: How the investments can be organised in the alternative finance landscape.

Financing models	Description
Donating	Giving money for a cause and/or to serve a societal purpose.
Reward seeking	Giving money for a potential future (non-financial) reward.
Investing	Acquiring shares, potentially achieving future profit through ownership.
Lending	Allowing for the temporal use of a sum of money, usually with interest.

The elements listed above can be combined depending on the objective of investors or entities looking for funds.

5. MAPPING THE INNOVATION ECOSYSTEM FOR TRANSPORT AND MOBILITY SOLUTIONS

5.1. PROJECT ANALYSIS

The goal of this section is to identify the main organisations participating to the EU funded projects analysed that could have an interest and a correlation with the ENTRANCE goal. The methodology described above led to the selection of **556 projects** on a total of more than 2500 projects analysed.

5.1.1. Top funding schemes

Most of the identified projects have been selected from the CEF programme (327)[3] and from the H2020 programme's Innovation Action (109). For each selected programme and for the several starting years of the selected projects, the sum of funded received and the number of specific selected projects are highlighted in the two figures below.

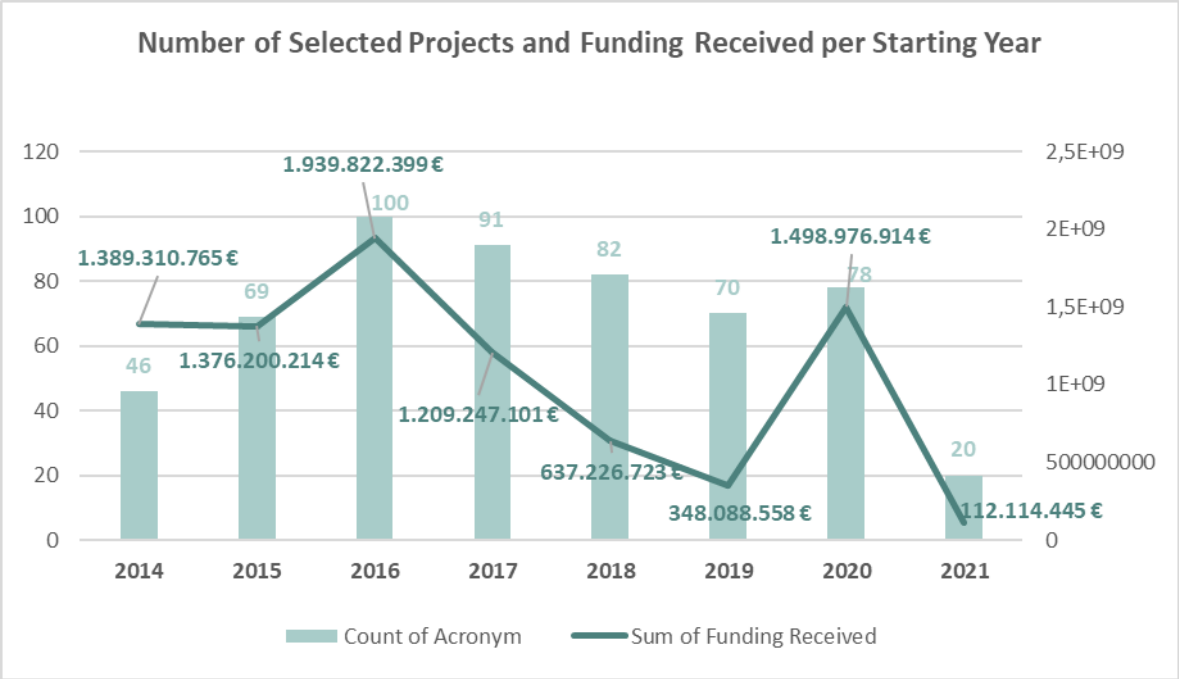

Figure 5: Number of selected projects and funding received per starting year.

[3] It is important to remark here that the CEF programme is way larger than others as it deals with infrastructures. However, even the figures may overshadow other programmes, these smaller programmes have also been considered for this assessment (inc. European Innovation Council opportunities).

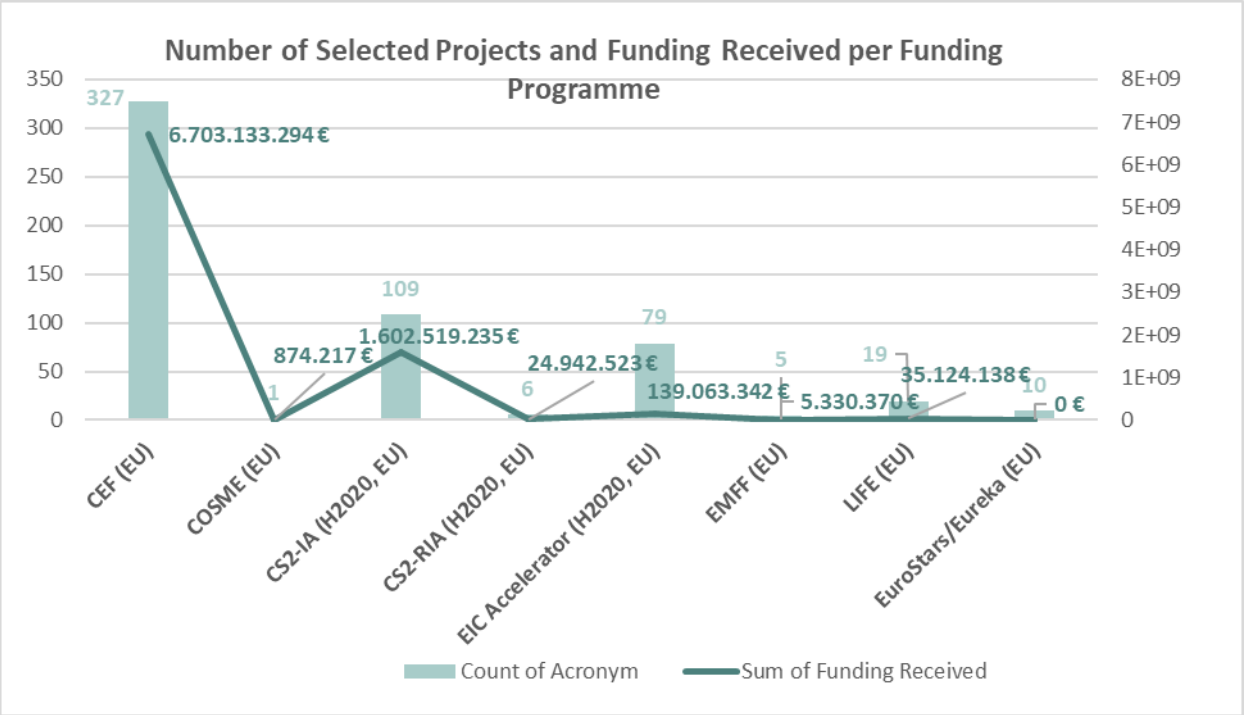

Figure 6: Number of selected projects and funding received per funding programme.

5.1.2. Stakeholders mapping

From the 556 selected projects, **1508 different organizations** belong to the three categories of "Supply, Demand and Finance" and could be interested in the ENTRANCE platform. The prevalence of these organisations are large companies with 541, followed by SMEs with 401, universities with 132 and public bodies with 127. Besides the type, these organisations have been analysed by country of origin and the most represented is **Spain with 224 organisations**, followed by Germany with 177, Italy with 175 and France with 171. The following figure summarises the organisation count for both type and country levels:

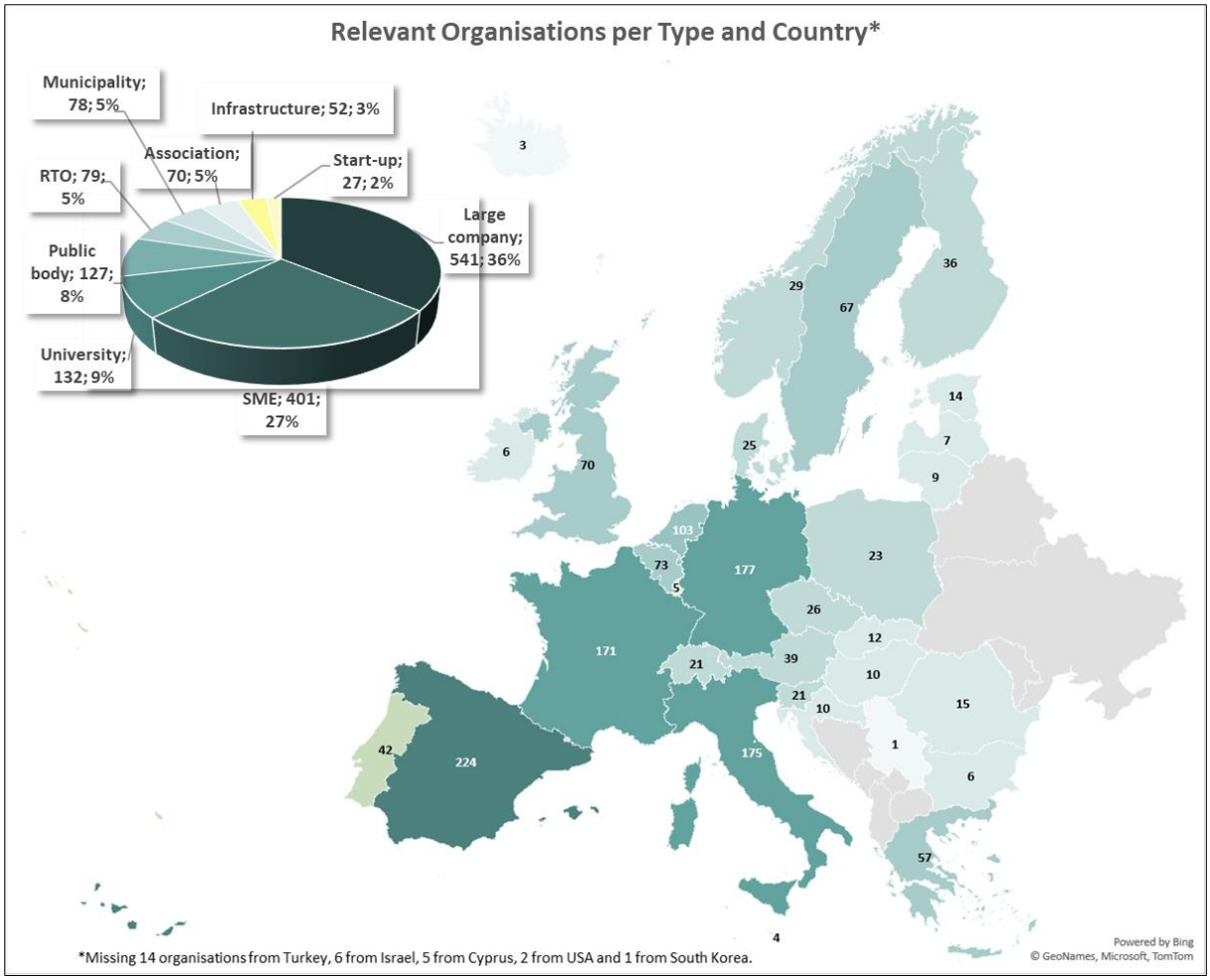

Figure 7: Relevant organisations per type and country of origin.

Regarding the organisations with more participations, the figure below shows, on the one hand, the companies and, on the other, all the non-profit organisations (RTOs, Universities, Public Bodies) that have 10 or more participations. The **German Aerospace Agency (DLR) is the most active with 18 selected projects**, followed by the Italian car manufacturer FCA SpA (now STELLANTIS Group) with 17 and Swedish Transport Administration with 16.

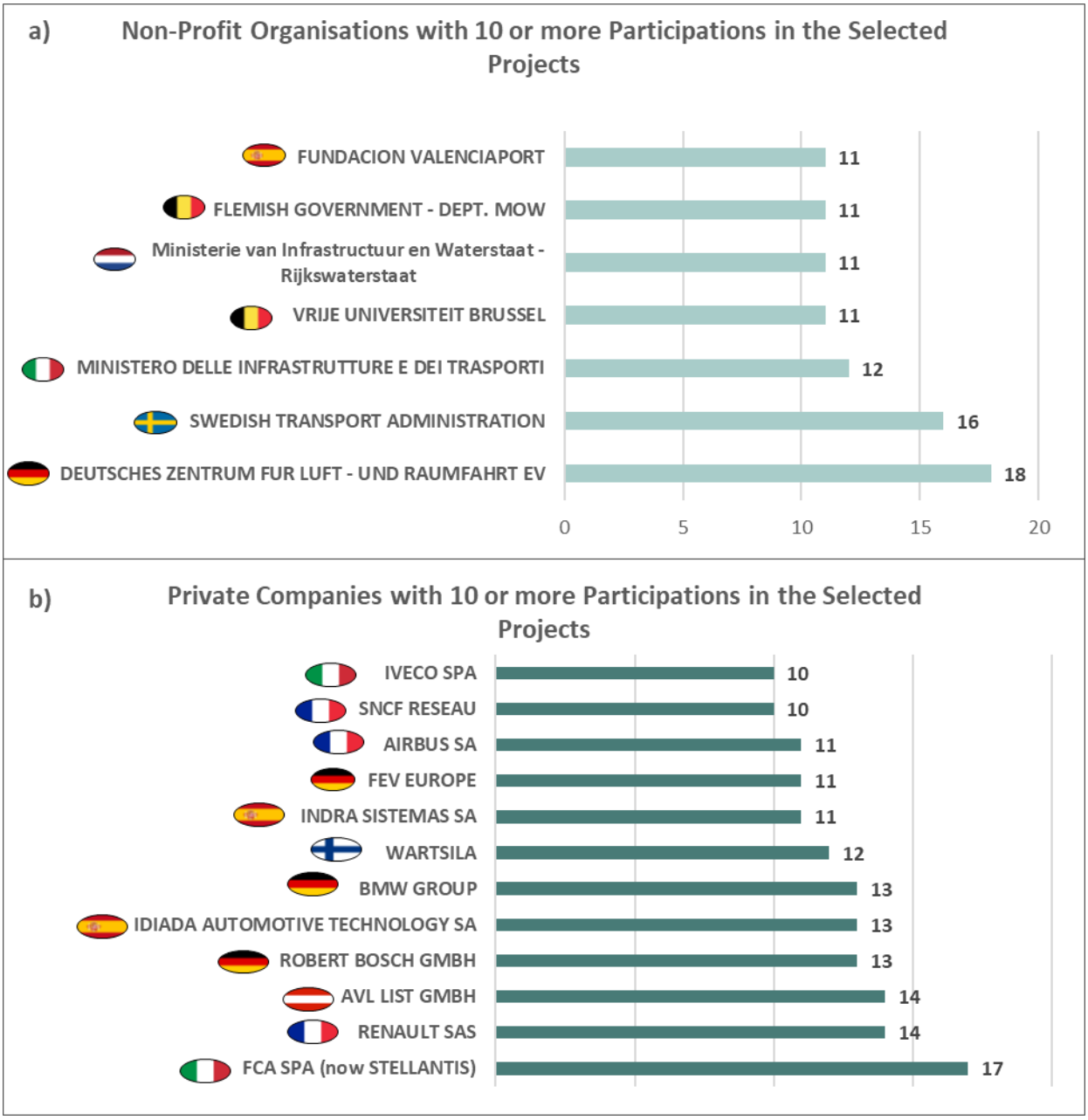

Figure 8: a) Non-profit organisations with more participations in the selected projects. b) Private companies with more participations in the selected projects.

5.2. PATENT ANALYSIS

Regarding the patent analysis, the query launched in Wheesbee (tool property of PNO group, see description in Annex 4) generated 2929 total patents and the methodology described above led us to select **163 patents**. Before analysing more in-depth the selected patents, an overview is shown on all resulted patents by the query launched in Wheesbee highlighting the trends in time (publication years) and the main CPC categories emerged. As for the years of publication, 2018 and 2019 present a significant increase compared to the other years of the considered period, both having more than 500 published patents.

Regarding the CPCs, on the other hand, **the majority includes patents relating to technologies for lowering the environmental impact in the transport sector**, followed by the category of "Vehicles in general" with respectively 26% and 25% of all patents resulting from the query launched on Wheesbee. The figure below shows both the analyses carried out.

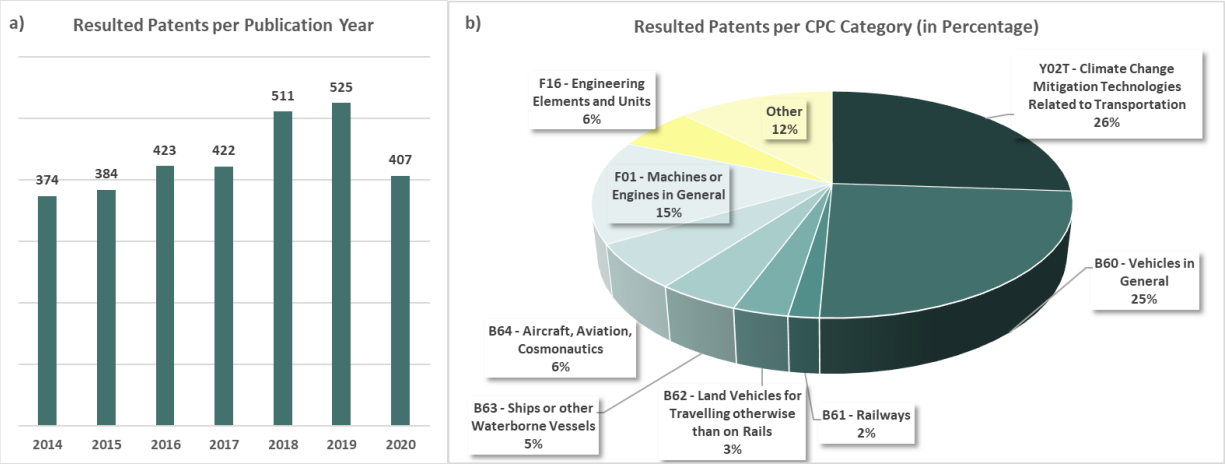

Figure 9: a) Number of resulted patents per publication year. b) Percentage of resulted patents by CPC categories.

Also the selected patents have been analysed by the CPC categories and the percentages substantially reflect those seen for all the resulting patents, with **the patents relating to technologies aimed at lowering the environmental impact which are 28%** and those which speak of vehicles in general 25%.

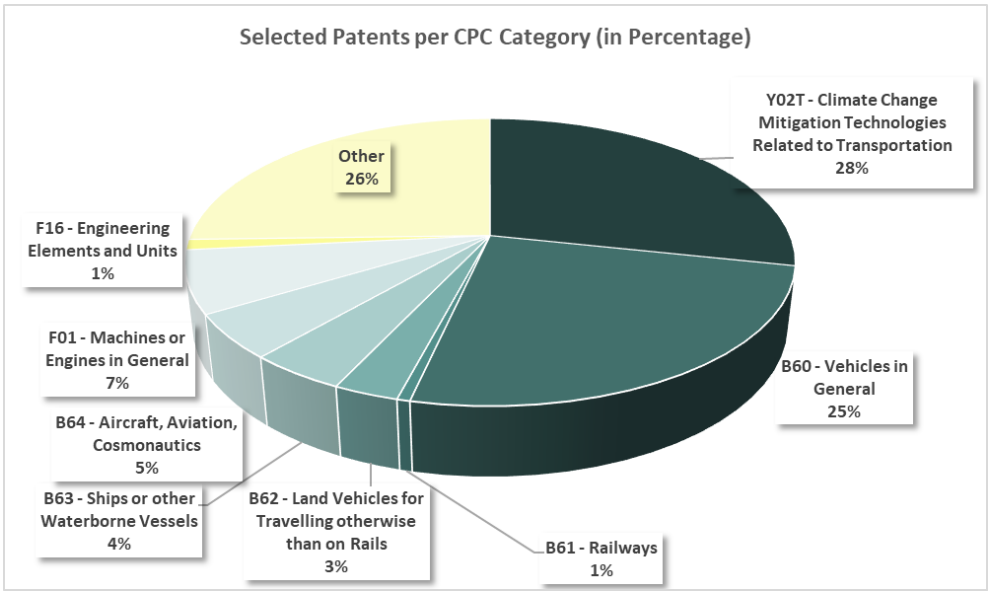

Figure 10: Selected patents per CPC categories (%).

The 163 selected patents have **136 different applicants**, most of all are large companies (80) and SMEs (38). Furthermore, as done for the projects analysis, the applicants have been analysed also based on their country and the most represented country is **Germany with 40 selected applicants**, followed by France with 24. The figure below shows the results for both categories just mentioned.

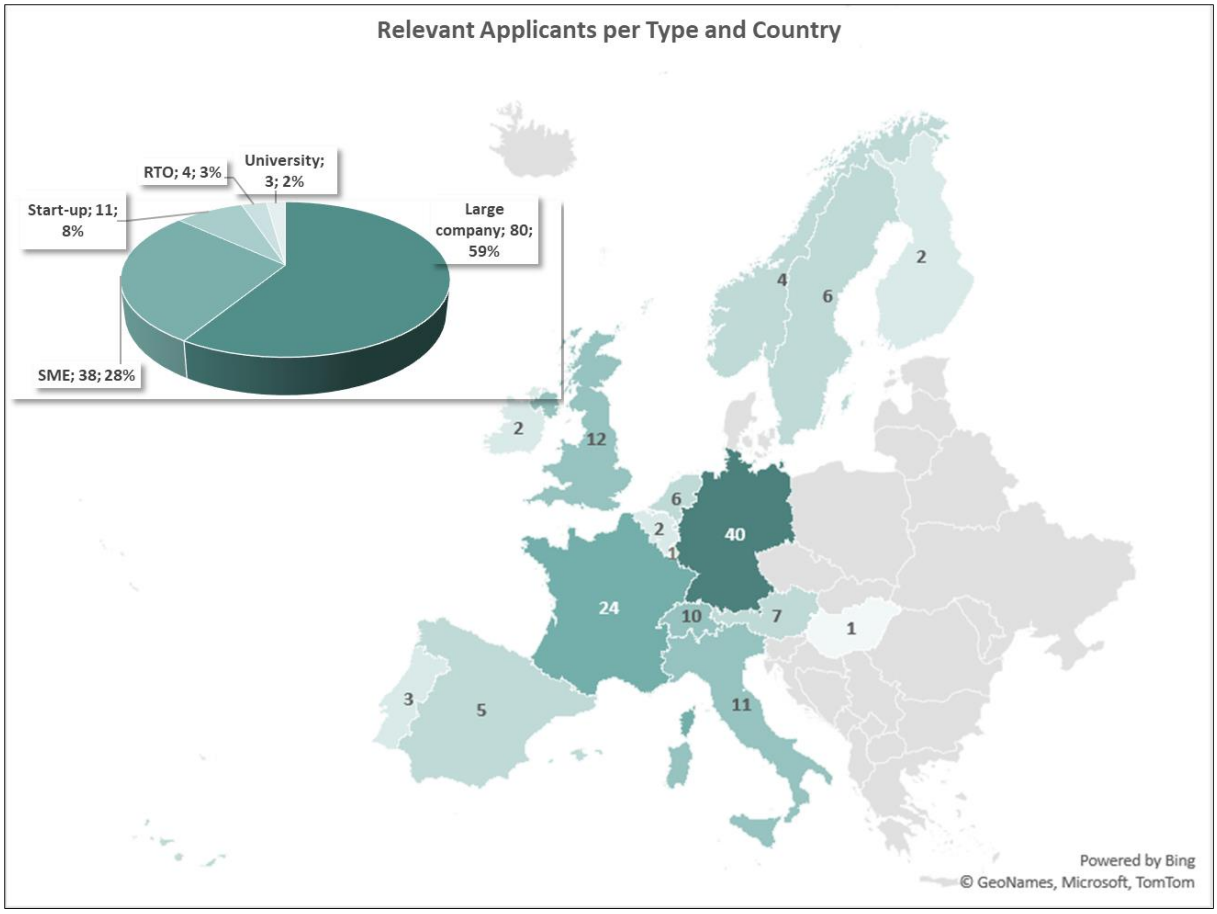

Figure 11: Relevant applicants per organisation type and country of origin.

The companies which have more patents under the list selected are **BMW, Scania and Siemens AG with 4 selected patents** each. **All the companies listed below are working in the road transport domain**, identified by B60 (Vehicles in general) CPC category, except Airbus Helicopters which has patented in Aircraft and Aviation (B64 CPC category) domain.

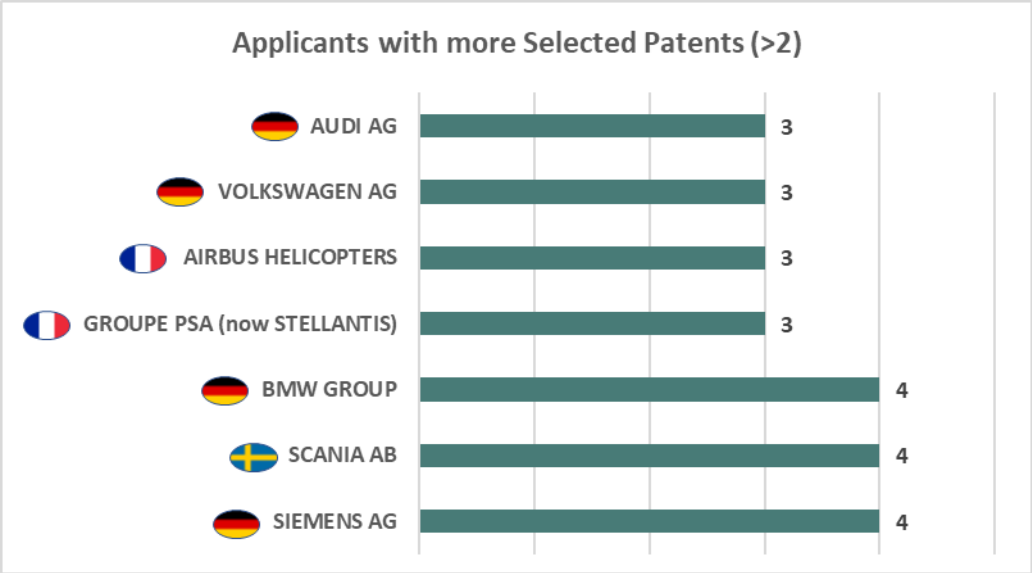

Figure 12: Applicants with more selected patents.

5.3. DESKTOP SEARCH DERIVED ORGANISATIONS ANALYSIS

The last step of searching organisations to put in the ENTRANCE platform has been the **desktop search** and the sources listed in section 3.4.1, led to the selection of **309 organisations**. Before showing the results relating to the type and country of origin of the organisations identified as already done for the projects and patents analyses, the table below shows the number of organisations selected for each website consulted. (*N.B. some selected organizations have appeared in multiple sources mentioned*)

Table 6: Number of organisations selected per website considered for the desktop search.

Number of Organisations per Source Analysed			
Seal of Excellence - Access2EIC	56	EIT Climate-KIC Start-ups	6
Euroquity - Companies	52	EIT Digital Accelerator	2
Euroquity - Investors	85	EU-Startups Database	50
InvestHorizon	16	Horizon Results Platform	36
EIT Urban Mobility Accelerator	20	Innovation Radar	74
EIT InnoEnergy Start-ups Portfolio	17		

Most of the organisations selected from the various websites considered are **SMEs (130) and start-ups (98)**, and most of them **(54) came from France**, followed by Germany and Spain with 41 and 36 respectively. The results of both categories are shown in the figure below.

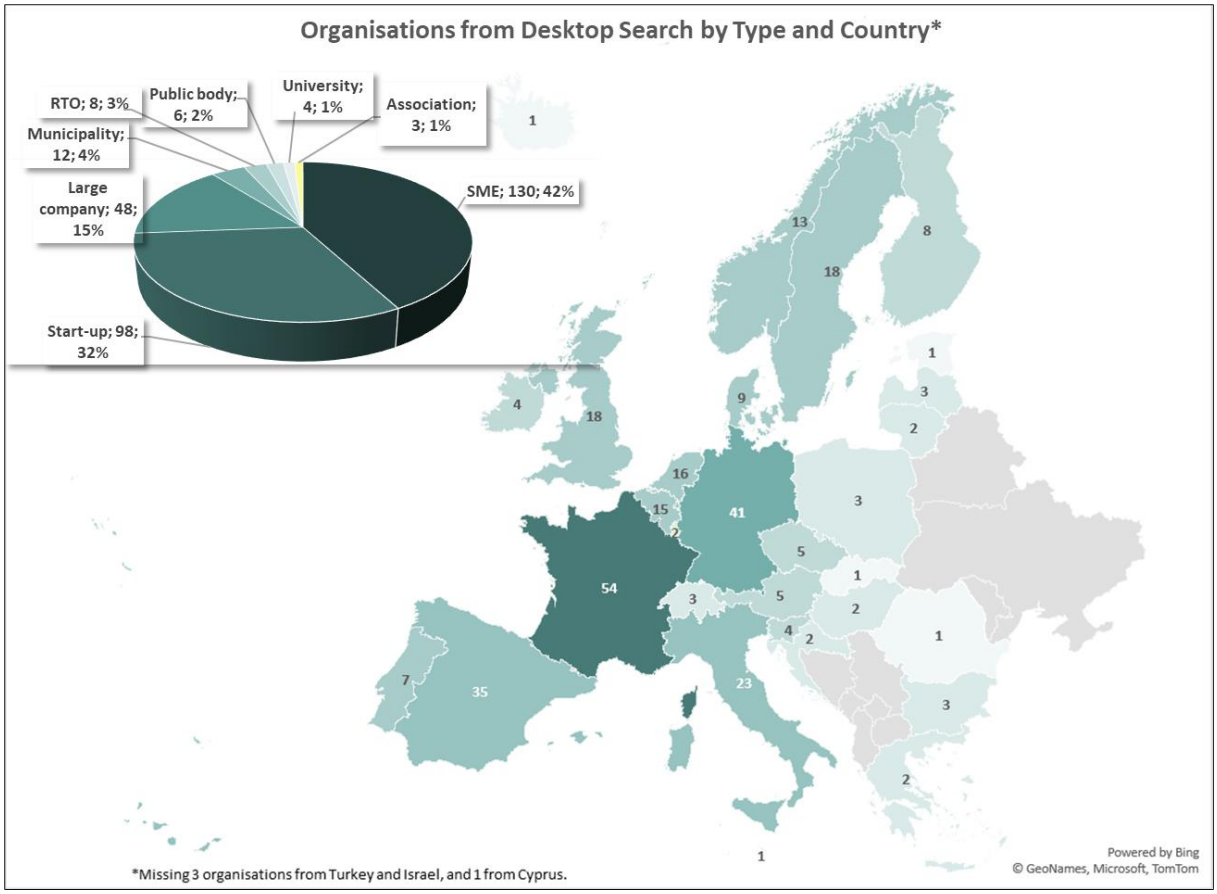

Figure 13: Organisations from desktop search by type.

5.4. MATCHING IDENTIFIED STAKEHOLDERS WITH ENTRANCE PLATFORM'S PROFILES

After having analysed the organisations resulted from project, patent and desktop analysis based mainly on the type, country of origin and most active selected organisations, these have been divided in the three categories provided by ENTRANCE: Supply, Demand and Finance.

Even for these three categories, the organisations have been analysed by type and country of origin, but here the accent is also on the technologies provided/interested and on the modes of transport.

5.4.1. SUPPLY: Mapping of the identified stakeholders

A total of **945 organisations** can be considered under the SUPPLY category as "providers" of technologies aiming to the reduction of emissions in the transportation sector. Among these 945 organisations, **407 are SMEs**, while there are 187 large companies, 136 universities, 131 start-ups and 84 RTOs. Most of the organisations belonging to the "Supply" category are from **Spain with 146**, followed by Germany with 130, France with 114 and Italy with 105. The figure below summarises the results of both categories.

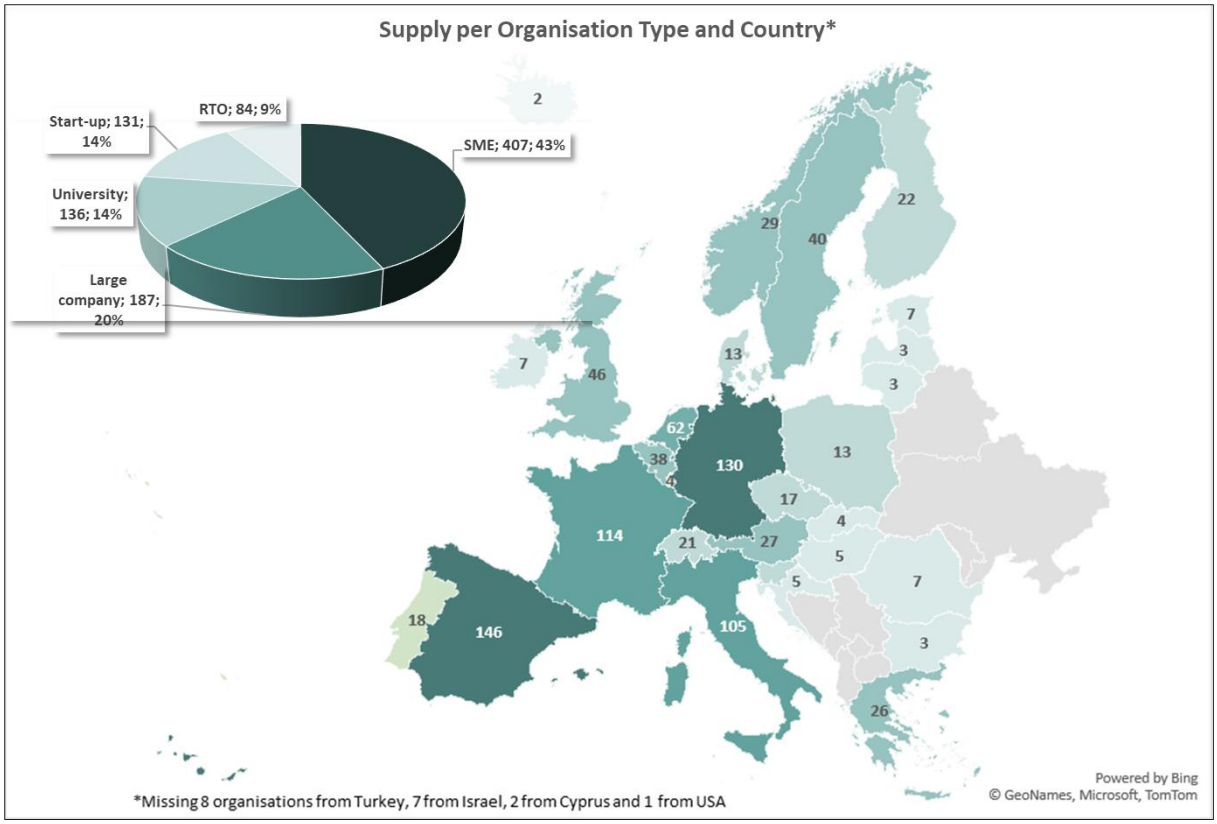

Figure 14: Typology and country of origin of the organisation belonging to the "supply" category.

The technology area with more suppliers is the **"Electrification"** in which **420 organisations** provide technologies or products. The electrification is followed by "Alternative Fuels and Vehicles" with 278 total providers and "Management Systems" with 233.

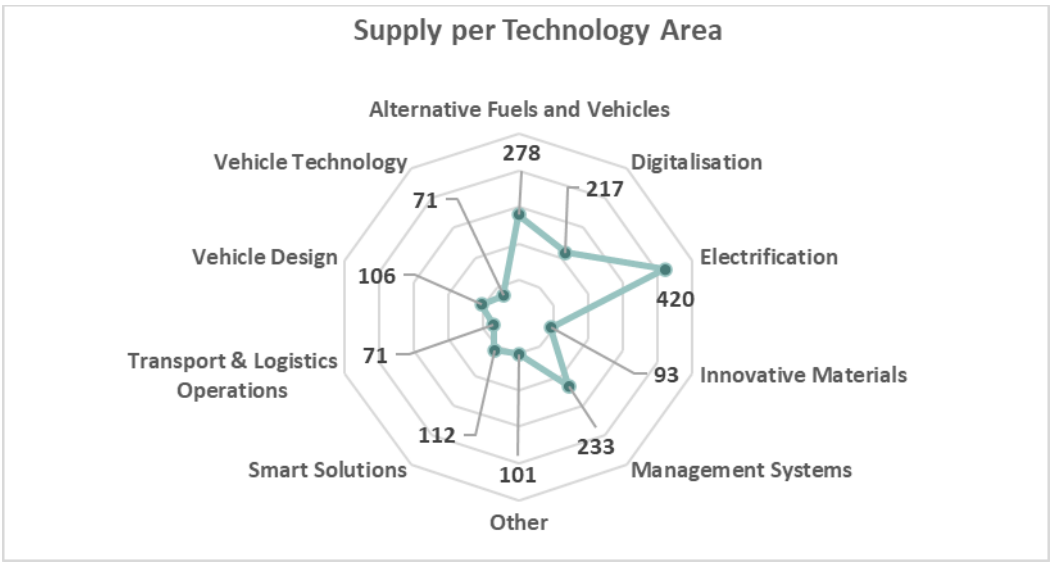

Figure 15: "Suppliers" per technology area.

Finally, the mode of transport in which there are more suppliers is **road transport with 648 providers**, followed by waterborne with 124, air with 119, rail with 117, multiple with 82 and modality with 9.

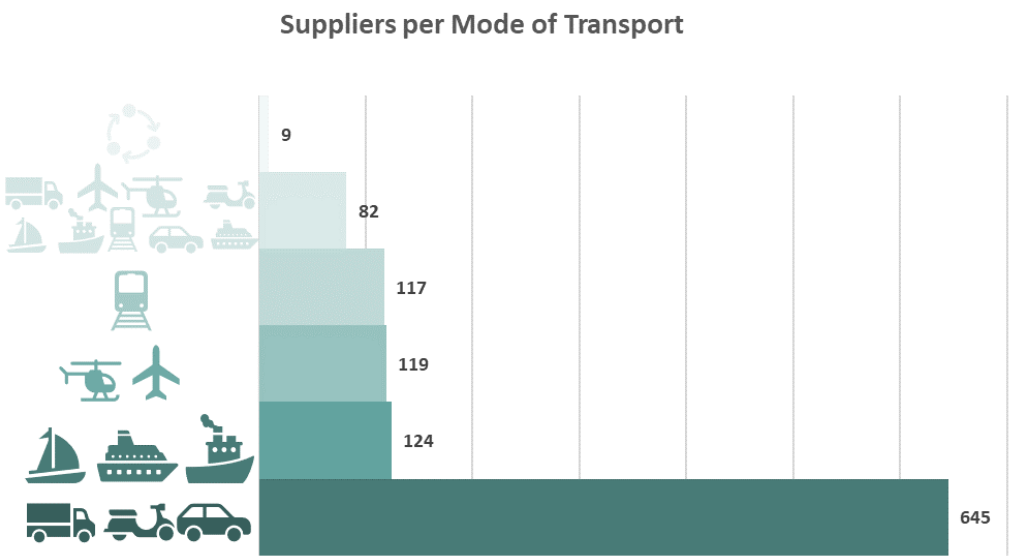

Figure 16: Number of suppliers per mode of transport.

Once the numbers relating to the "supply" area were shown, the main suppliers were collected in a single figure and divided by mode of transport. *The top suppliers were chosen on the basis of a ranking* carried out which then established their position in the various Market and Innovation Positioning Maps shown in section 6 of this document. In addition to this ranking, *the number of participations in the selected projects, the number of patents selected and the number of times they appeared in the desktop analysis* were also considered, giving priority to private companies. The figure containing the top suppliers is shown below.

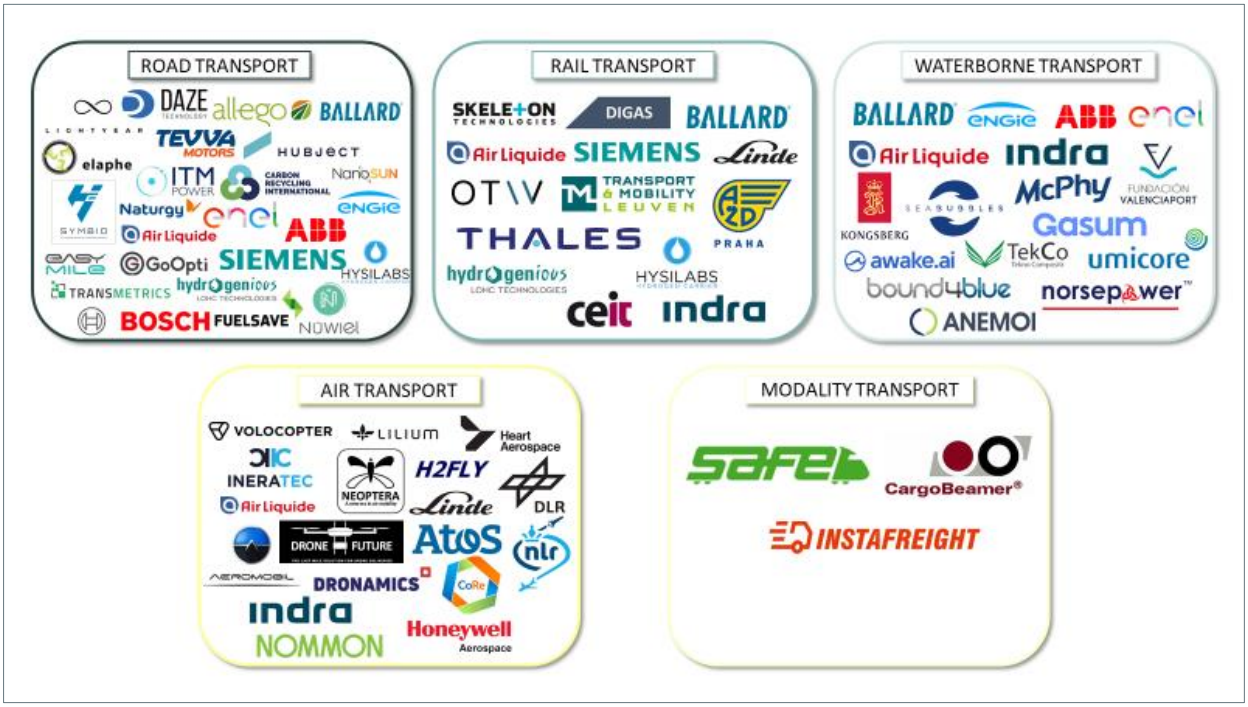

Figure 17: Top suppliers per mode of transport.

5.4.2. DEMAND: Mapping of the identified stakeholders

The analysis has also been carried out for the DEMAND category, identifying potential "buyers" of the technologies. **1023 organisations** can be considered under this category. Most of them are **large companies (448)** followed by SMEs (143), public bodies (129) and municipalities (86). Regarding the countries most represented, **most of the "potential buyers" came from Spain (154)**, Italy (123), Germany and France (114). The figure below summarises the results of the two categories just mentioned.

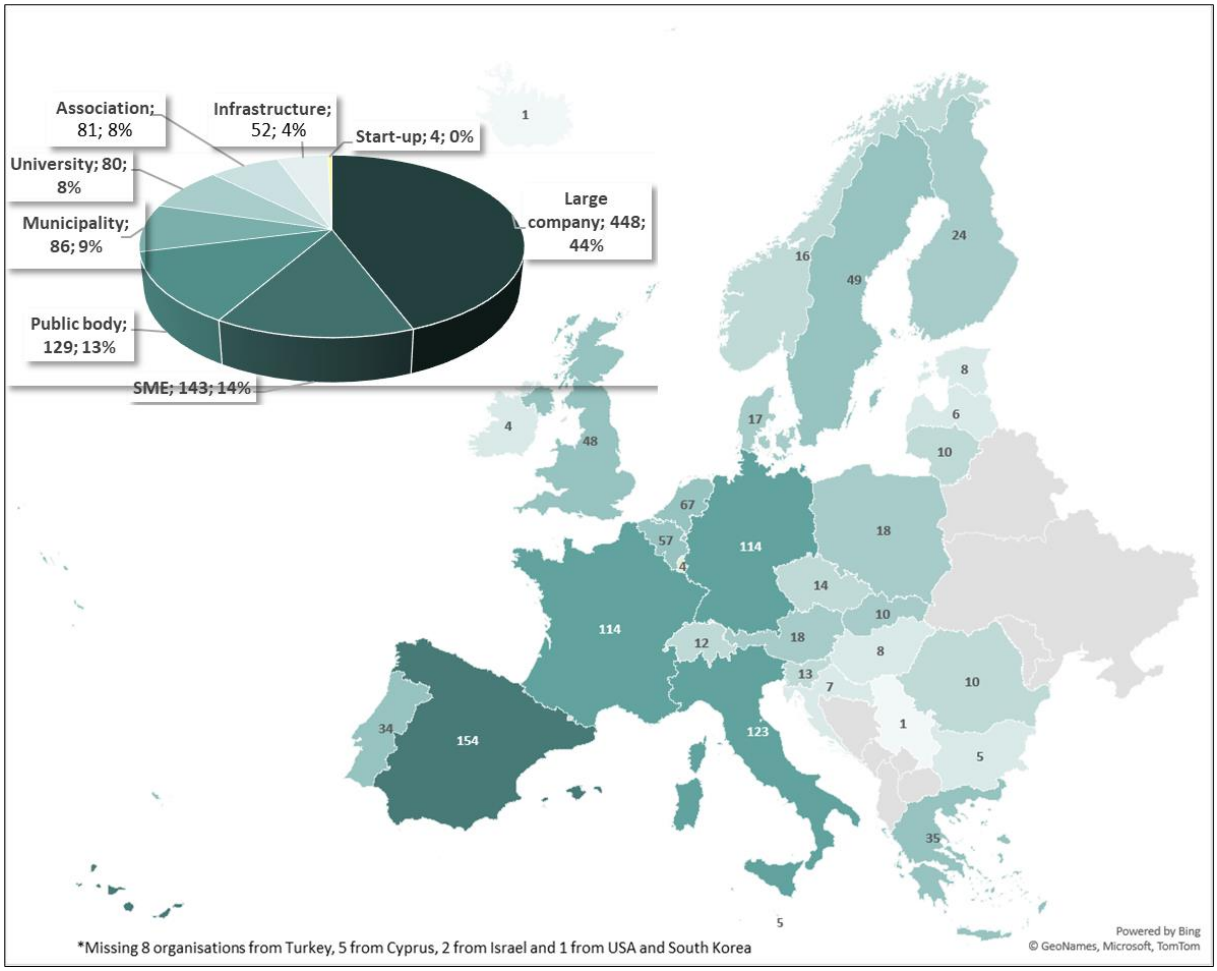

Figure 18: Typology and country of origin of the organisation belonging to the "demand" category.

The technology area in which more potential buyers are interested is the **"Electrification" with 473 organisations** present in the "demand" category, followed by "Management Systems" with 426 and "Alternative Fuels and Vehicles" with 415.

It is important to remark here that some profiles that could be expected to be considered as suppliers for the ENTRANCE platform like universities or start-ups, can at the same time play the role of 'demand' in case that they are requesting or acquiring knowledge to exploit or investing/purchasing disruptive solutions.

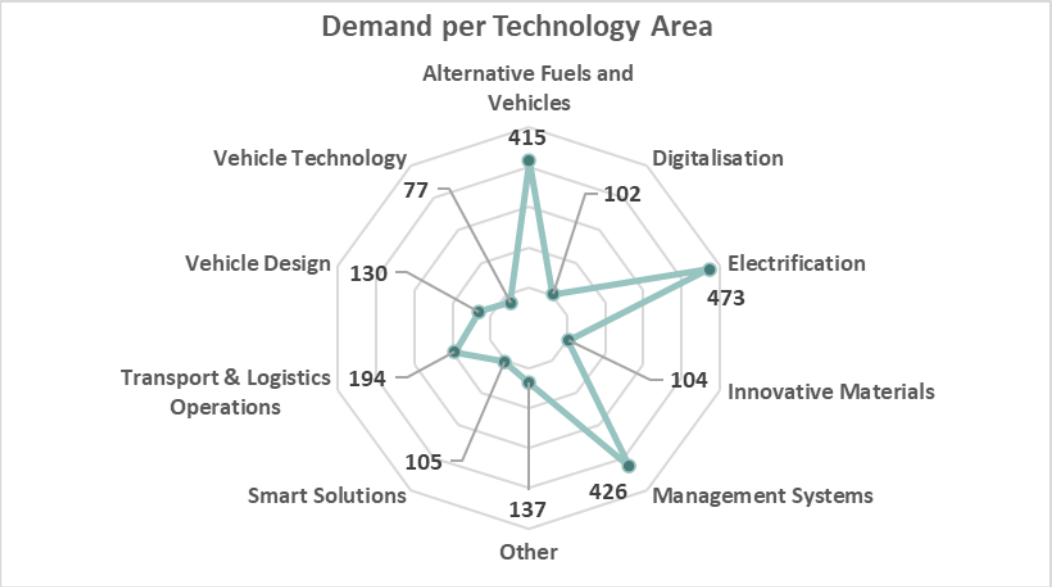

Figure 19: "Buyers" per technology area.

The mode of transport in which the selected potential buyers are more active is **road transport with 483 organisations** followed by waterborne transport with 241, rail with 198, air with 110, multiple with 76 and modality with 48.

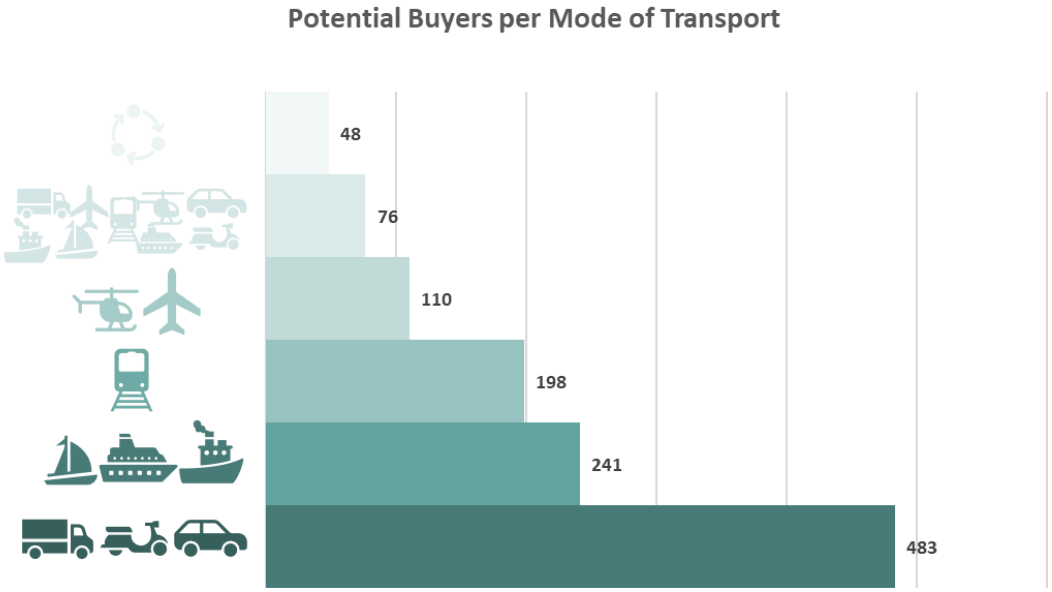

Figure 20: Potential buyers per mode of transport.

As done for the suppliers, also for the "demand" category the top buyers were put together in a single figure and divided by mode of transport. The selection criteria are the same as those adopted for the "supply" category. The figure in question is shown below.

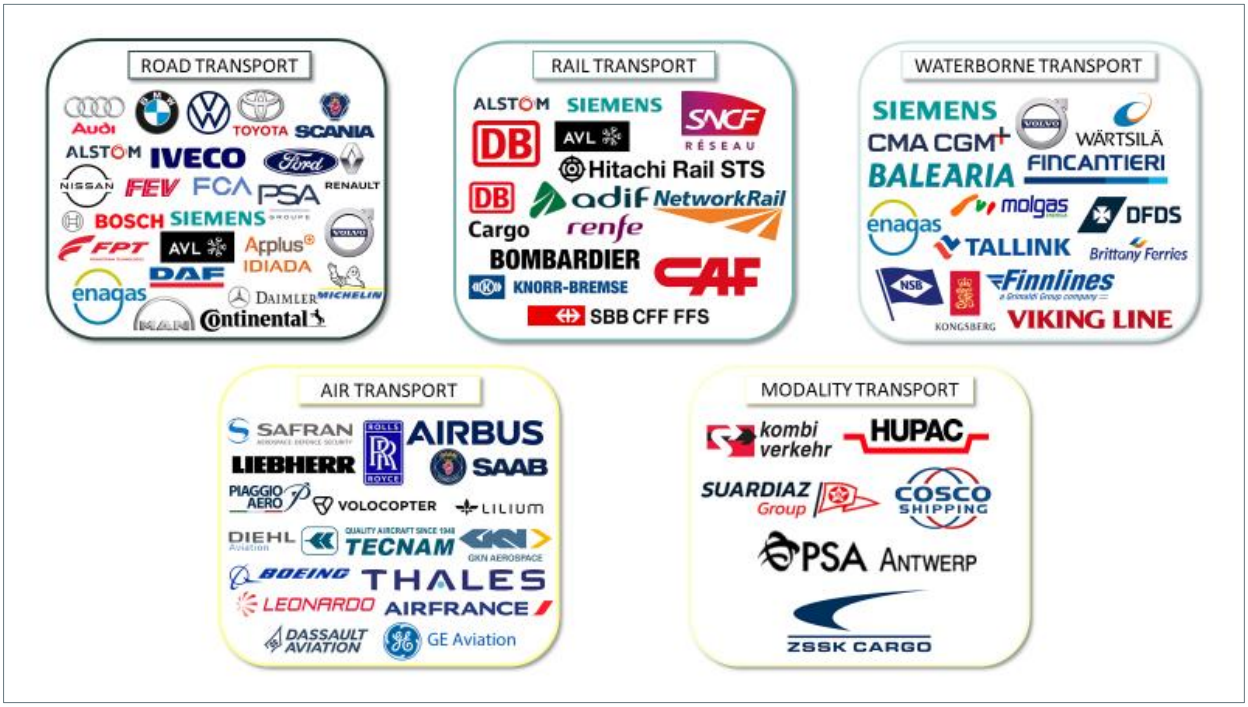

Figure 21: Top buyers per mode of transport.

5.4.3. FINANCE: Mapping of the identified investors

Regarding the **"Finance"** category, a total of **224 investors** have been selected. In this category the focus was on the typology (private, public or hybrid) of the selected investors and on the type of beneficiaries they address. Indeed, most of the identified investors are **large companies with corporate ventures (58)** and venture capital and business angels (53). Furthermore, as done previously, the countries of origin of the selected investors have been analysed and most of them are from **France (41)**, followed by Germany with 28 and Belgium with 20. The figure below shows all the results about the type and country of origin of the selected investors.

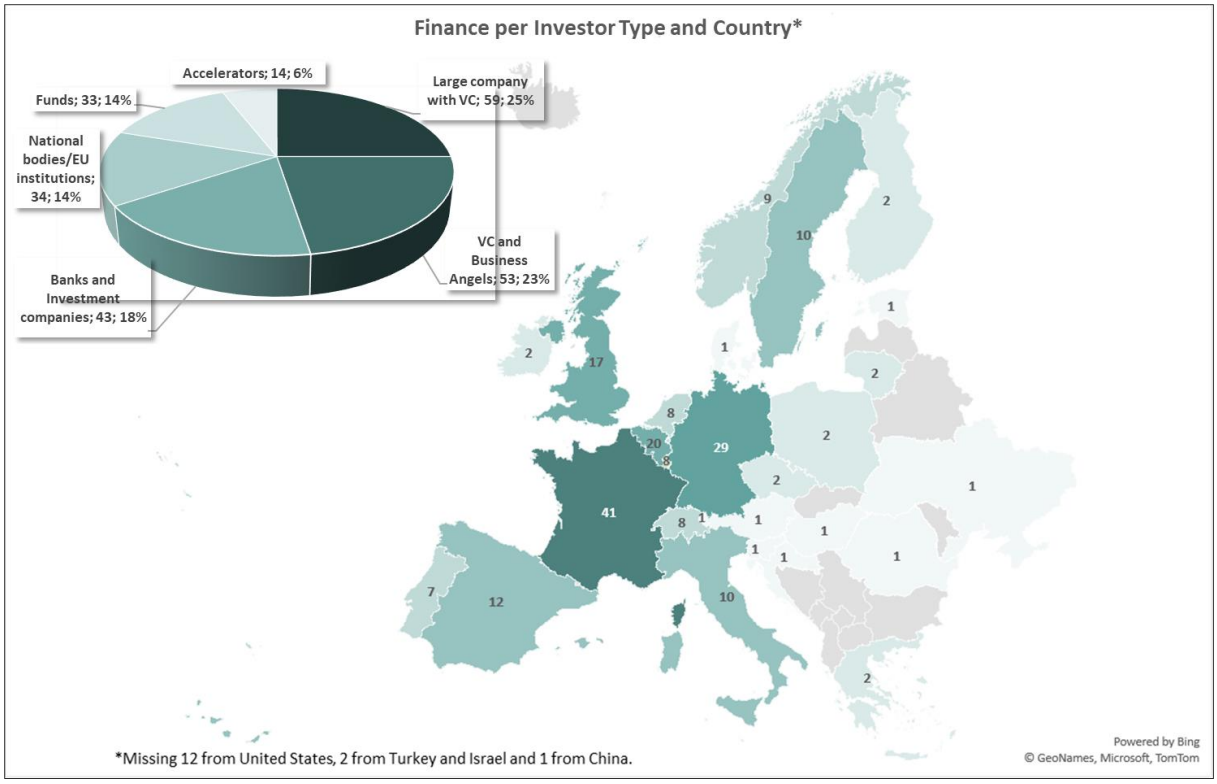

Figure 22: Typology and country of origin of the organisation belonging to the "finance" category.

Finally, the selected investors have been analysed based on the beneficiaries they address and **almost all of them invest in start-ups (203)**. Then, 116 of the selected investors finance small-cap companies, 106 mid-cap companies and 44 finance mixed and consortia.

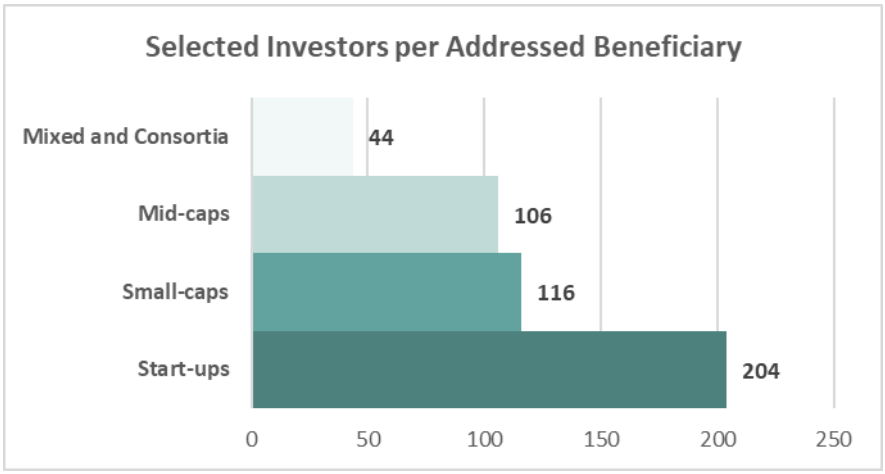

Figure 23: Selected investors per type of addressed beneficiaries.

A list of top investors can be seen in section 3 of this document, in *Figure* 3. The investors in the figure in question have been represented by type and their choice is purely representative, as their selection process was different from the suppliers and buyers as explained above and therefore it was not possible to rank them.

5.5. MAPPING THE COMBINED ECOSYSTEM BY NETWORKS AND PARTNERSHIPS

The methodology that guided the stakeholders identification and their inclusion in the three categories of interest (supply, demand and finance) also contributed to map the main European networks and partnerships that can facilitate the matchmaking between supply, demand and finance in the transport and mobility sector. To pursue this objective, however, attention has been focused on the various initiatives in the transport and mobility field carried out both by funded projects and European Commission. In this section, moreover, an ad hoc search of associations, networks and councils has been carried out carried out. These entities can act as an intermediary for their members in the adoption of financing methods, from public procurement to the typical Series A fundings. (*Some of the actors present in this section will not be present in the Annexes as only the members who have shown interest in the technologies in question have been extracted there*).

This section emphasizes on public demand, which, as described previously, often decides to finance the development and adoption of those solutions that meet their needs. For this reason, it was decided to represent an ecosystem that would include: the main networks and / or partnerships representing the public buyers most interested in sustainable solutions in the transport sector and those who can actually develop solutions of interest to them; partnerships at European level capable of bringing together supply and public demand; networks of investors and tools / platforms of public procurement. Below, each section of this mapping is explained in the detail.

- **Buyers networks** – networks, partnerships or associations representing the main public or public/private buyers (cities and public bodies) interested in solutions for making transport and mobility more sustainable.
- **Solution providers networks** – networks, partnerships or associations representing providers of solutions which may be of interest to the various challenges facing cities and local governments.
- **Investors networks** – networks of investors which facilitate the fundings for high-tech companies.
- **Innovation procurement** – this section identifies the various initiatives aiming to improve the public procurement of innovative solutions at European level.
- **Horizon Europe Partnerships** – European partnerships bringing the European Commission and private and/or public partners together to address some of Europe's most pressing challenges through concerted research and innovation initiatives in transport and mobility sector. By bringing private and public partners together, European Partnerships help to avoid the duplication of investments and contribute to reducing the fragmentation of the research and innovation landscape in the EU. They are a key implementation tool of Horizon Europe. (European Commission definition)
- **EU Projects** – list of European funded projects with which ENTRANCE could undertake initiatives because they are interesting under two aspects: they are still active projects that have and / or will have tested and implemented sustainable solutions in pilot cities; they are projects focused on

public procurement as a method (or one of the methods) of financing for the development of solutions of interest to public entities.

For each section identified, the analysis conducted led to the identification of the following entities.

- Buyers networks: *Big Buyers Initiative* (it derives from a EU funded project); *ICLEI*; *Covenant of Mayors*; *CIVITAS Network*; *Intelligent Cities Challenge* (it also conducts public procurement initiatives); *Electric Vehicles Initiative*; *Shared Mobility Principles for Livable Cities*; *ERRIN*; *CLEPA*; *ENERGY CITIES*; *Transport Community*; *EuroPlatforms*; *Transformative Urban Mobility Initiative (TUMI)*; *The Association of European Vehicle Logistics*; *Urban-Air-Mobility Initiative Cities Community (UIC2)*; *C40 Cities*; *EUROCITIES*; *POLIS Network*; *EPOMM*.
- Solution providers networks: *Enterprise Europe Network*; *EIC Business Acceleration Services*; *European Cyclists' Federation (ECF)*.
- Both buyers and solution providers networks: *Waterborne*; *EGVIAfor2ZERO*; *Smart Cities Marketplace Initiatives* (Intelligent Mobility for Energy Transition; New Mobility Services; Electric Vehicles for Smart Cities and Communities; Urban Air Mobility); *ERRAC* (the European Rail Research Advisory Council); *ERTRAC* (European Road Transport Research Advisory Council); *UIC* (International Union of Railways); *EIT Urban Mobility*; *ERTICO*; *ALICE*; *Smart Freight Centre*; *Urban Europe*; *UITP* (International Association of Public Transport); *EICB* (Expertise- en InnovatieCentrum Binnenvaart).
- Investors networks: *European Investment Bank*; *Drive Sustainability*; *Invest Europe*; *Invest Horizon*; *Smart City Infrastructure Fund*; *Eureka Network*; *European Investment Advisory Hub*; *Business Angels Europe*; *EBAN* (European Business Angels Network).
- HEU partnerships: *Clean Aviation*; *CCAM* (Connected, Cooperative and Automated Mobility); *Clean Hydrogen*; *Driving Urban Transition*; *Batteries*; *Zero-Emission Waterborne Transport*; *Integrated Air Traffic Management*; *Transforming Europe's Rail System*; *2ZERO*; *KDT JU* (Key Digital Technologies Joint Undertaking).
- EU projects: *AI4CITIES*; *RECIPROCITY*; *CIVITAS FastTrack*; *CIVITAS ELEVATE*; *FENIX*; *ASSURED-UAM*; *ECHARGHE4DRIVERS*; *LASTING*; *PLATINA 3*; *FUTURE-HORIZON*; *BOOSTLOG*. EU-funded projects addressing also public procurement initiatives: *U-MOB Life*; *LNG Hive2*; *JIVE 2*; *C-ROADS*; *EALING*; *SOLUTIONSplus*; *SHOW*.

This combined ecosystem is shown in the figure below.

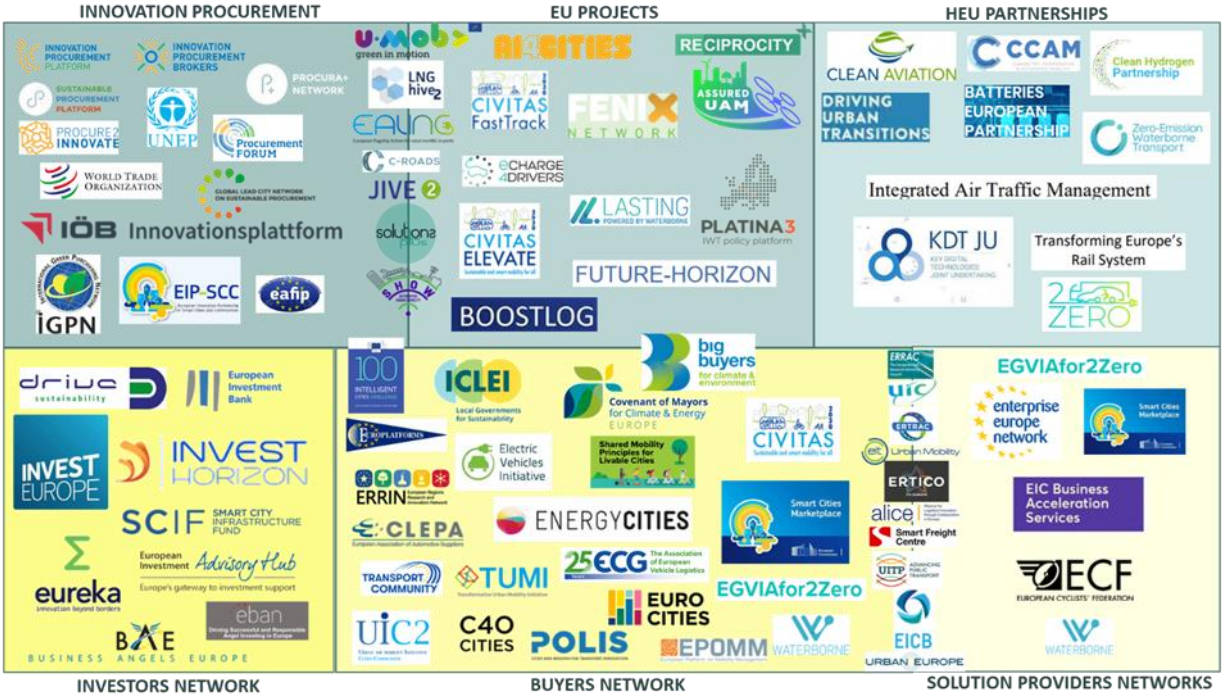

Figure 24: Public procurement ecosystem mapping.

6. IDENTIFICATION OF KEY PLAYERS FOR THE ENTRANCE PLATFORM

6.1. ENTRANCE POSITIONING MAPS

The identification of some of the most relevant organisations resulting from the analysis carried out and summarised in the previous section, has been illustrated by using PNO's *Market and Innovation Positioning Maps* © whose general concept is described above. They are organised per mode of transport and represented according to the ENTRANCE taxonomy (Table 2), except than for *Modality*, for which a single MIPM was built.

Following the general description in Section 3, for each technology and mode of transport the results have been extracted and displayed in the related maps, where the following criteria have contributed to rank the organisations and position them therefore:

- More selected interesting project participations
- More selected related published patents
- More presences in the databases consulted for the desktop search
- Presence in all or two of the three (projects, patents, desktop) analyses carried out
- Priority to SMEs and Start-ups if they don't meet the above criteria.
- Higher TRLs and readiness

The resulting MIPM are displayed below. It should be noted that despite the detail, the classifications are very broad and in principle dynamic since positions can change in time. This reflects into the variety of companies found on the same map. In principle, more specific maps can be built effectively to scout specific sectors.

HOW TO READ THE MAPS?

- the more an organisation is on the right the more it respects the above criteria and is innovation oriented for the specific observed ENTRANCE technology.
- The right quadrants are thus more related to suppliers, with the lower part including innovators with lower financing capacity
- The left quadrants relate to interested buyers (up) or companies moving towards the market or part of niche experts crowd (down)
- Maps more crowded on the right represent more mature technology segments

6.2. ELECTRIFICATION

There is a large number of organisations contributing to the development, improvement and adoption of electric vehicles or other electrification technologies to reduce and mitigate emissions in the transportation sector.

The maps below show that for each mode of transport there are some companies that are ahead of others from an innovative point of view. This means that there are companies specialised per each transport mode that are driving innovation.

In the **road transport** segment, there are two SMEs having a higher innovation and affinity rate compared with other organisation present in the ***Figure** 25*: Lightyear One (a long range **solar electric vehicle**) and Tevva Motors (an **e-Trucks fleet**) can be indeed considered at the forefront in the electrification of road transport; besides these two, Daze Technology Srl, can be highlighted. They are an SME which produces and supplies **charging systems for electric cars** and which is very close to the right side of the map, having an excellent innovation and affinity rate.

The electrification of **rail transport** shows few interesting companies which are investing in or are developing innovative technologies. However, the map (***Figure** 26*) shows a company which differs from the others by its position: Skeleton Technologies, an SME that develops **ultracapacitors** which have the potential to revolutionize the rail industry in terms of energy savings able to provide effective voltage stabilization for rail systems, greatly improves the performance of propulsion for light rail vehicles and significantly advances the locomotive engine starting technologies.

The electrification of **waterborne transport** shows such interesting companies which are investing in or are developing innovative technologies. Among the various big companies on the map (***Figure** 27*) in the area of electricity production / supply / usage, to emerge is SeaBubbles, a French start-up which has developed a small, fast & very efficient **electric hydrofoil craft** that that can carry a driver & four passengers with a max speed of 30 km/h, while producing no emissions or noise.

Finally, the electrification of **air transport** sees several emerging companies in the right part of the map (***Figure** 28*), which classifies them as the most innovative. Indeed, the map highlights Lilium Aviation and Volocopter GmbH as “incumbents”. The two companies can be considered the pioneers of the electrification of air transport, both promoting **air electric mobility as a regional taxi service with vertical take-off landing (VTOL)** and being both very young and becoming large enterprises in a short time thanks to the huge funding received and then the revenues earned. Similar companies that in the next future can fall into the right part of the map are *Heart Aerospace* and *Neoptera Aero*.

Figure 25: Main actors in the electrification of road transport.

Figure 26: Main actors in the electrification of rail transport.

Figure 27: Main actors in the electrification of waterborne transport.

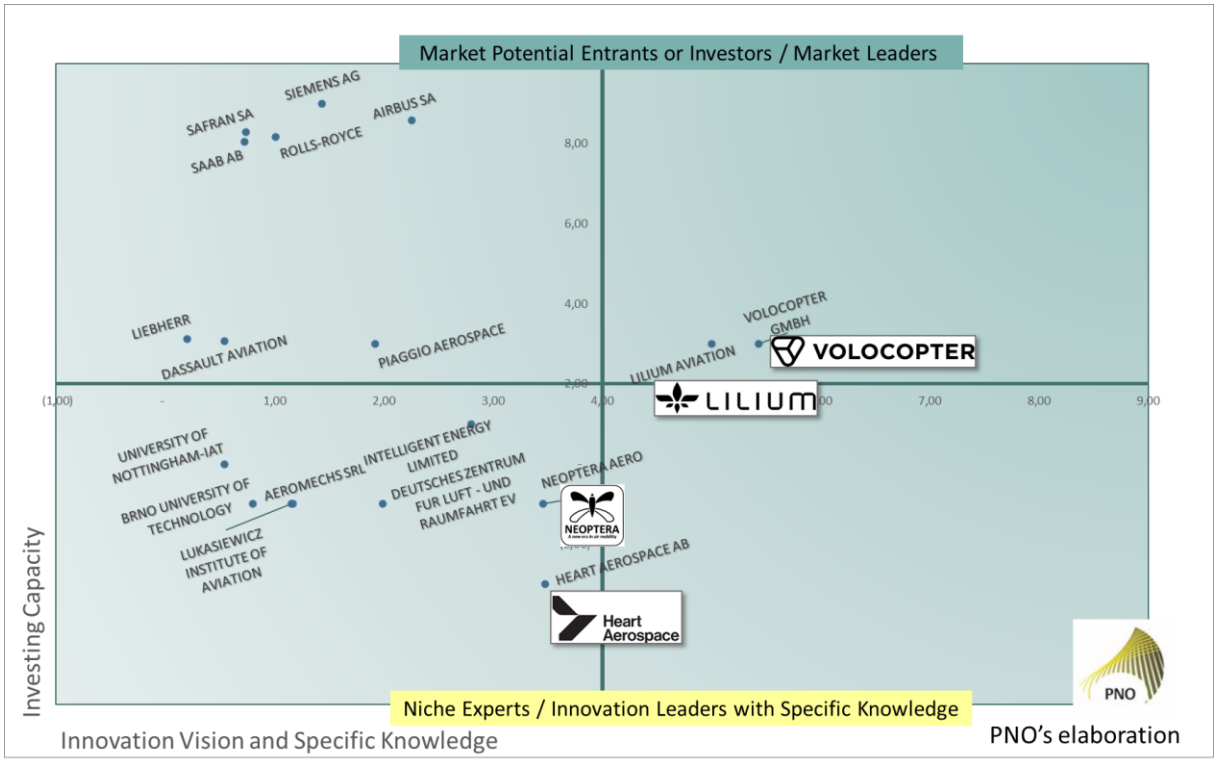

Figure 28: Main actors in the electrification of air transport.

6.3. ALTERNATIVE FUELS AND VEHICLES

In this specific category, there is a large number of potential buyers of innovative technologies in its upper-left part and a more moderate number of followers / potential providers at the bottom. Again, this reflects an opportunity as long as the ecosystem will not generate “movement” to the right of the map and thus towards the market.

As the maps in this section show, the majority of large companies versus those that should drive innovation is evidenced by the fact that the market appears to be "dominated" by the same company in at least three out of four sectors: Ballard Power Systems Europe, which is a leader in developing **fuel cell solutions** for different types of transport, is the most innovative company emerged in the maps related the **road, rail and waterborne transportation**.

The map related the **road transportation** (***Figure** 29*) shows that, besides Ballard positioned in the right part, there are two SMEs and a start-up which are next to the line that divides the most innovative companies from the least ones: ITM Power Plc, which manufactures integrated **hydrogen energy solutions** to enhance the utilisation of renewable energy that would otherwise be wasted; Carbon Recycling International (CRI EHF), an Icelandic SME that produces **renewable methanol** for the road transport sector; NanoSUN Limited, a UK start-up which has re-invented the **hydrogen refuelling station** to accelerate the adoption of hydrogen in transport.

Regarding the **rail transport**, the map (***Figure** 30*) shows few companies related to the development and adoption of this technology and only one located below the line that divides those with more investment capacity from those with less, which should instead be technology suppliers. This company is Digas Group, a Latvian SME which has developed and patented a **dual fuel system**, called NYSMART, that can be quickly and simply installed onto diesel engine converting it into dual fuel engine where environmentally friendly, clean and inexpensive methane fuel (Natural gas, Bio methane, Synthetic gas) is used to substitute polluting and expensive diesel fuel in locomotives.

The **waterborne transport**, instead, sees a high number of companies, but none that differs from the others according to its position on the map (***Figure** 31*), unlike the aforementioned Ballard.

Finally, the **air transport** is the unique transport mode in which Ballard does not appear. The map (***Figure** 32*) highlights on the right side H2Fly GmbH, a start-up founded by DLR, which is building and promoting hydrogen electric passenger air travel with its in-house **hydrogen electric powertrain**. In addition to H2Fly, two SMEs are located further to the right of the others and therefore considered more "innovative": Ineratec GmbH, which provides modular chemical plants for **Power-to-X and Gas-to-Liquid applications** and supplies sustainable fuels (e-kerosene, clean diesel, methanol, etc.) and products, and AeroMobil SRO, which is developing a **flying car with hybrid propulsion.**

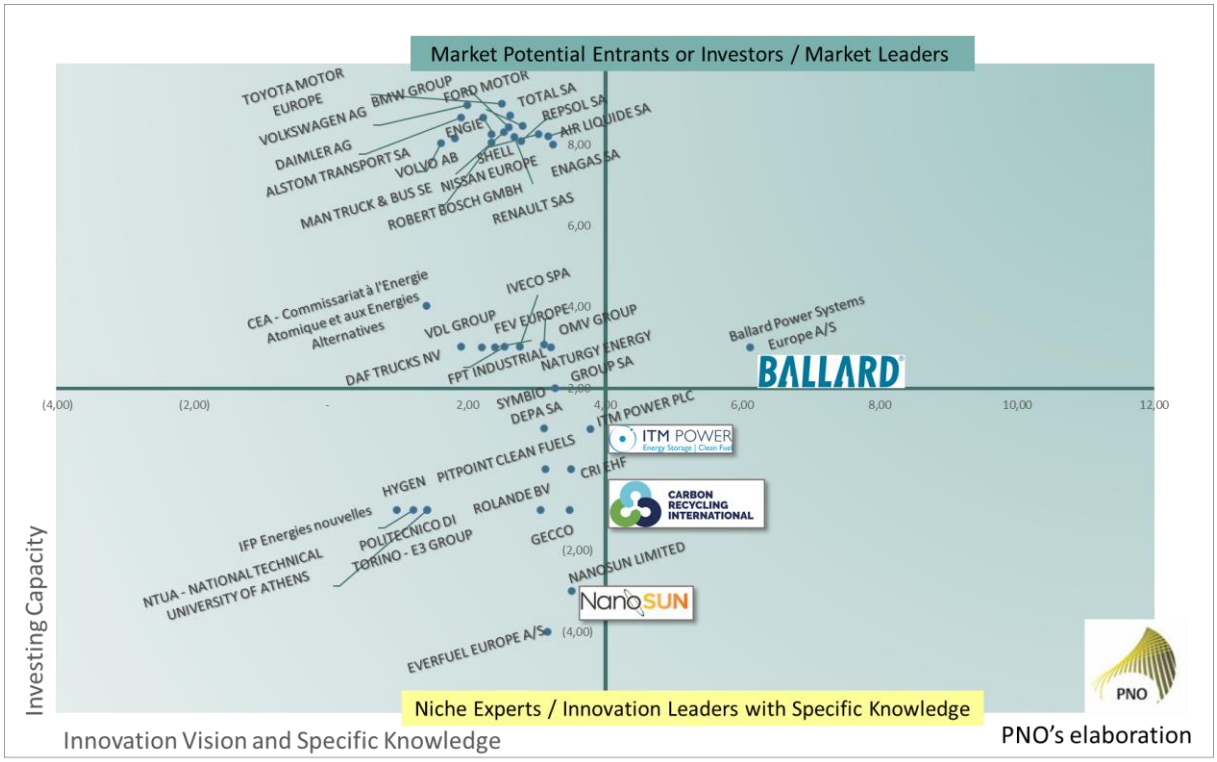

Figure 29: Main actors in alternative fuels and vehicles for road transport.

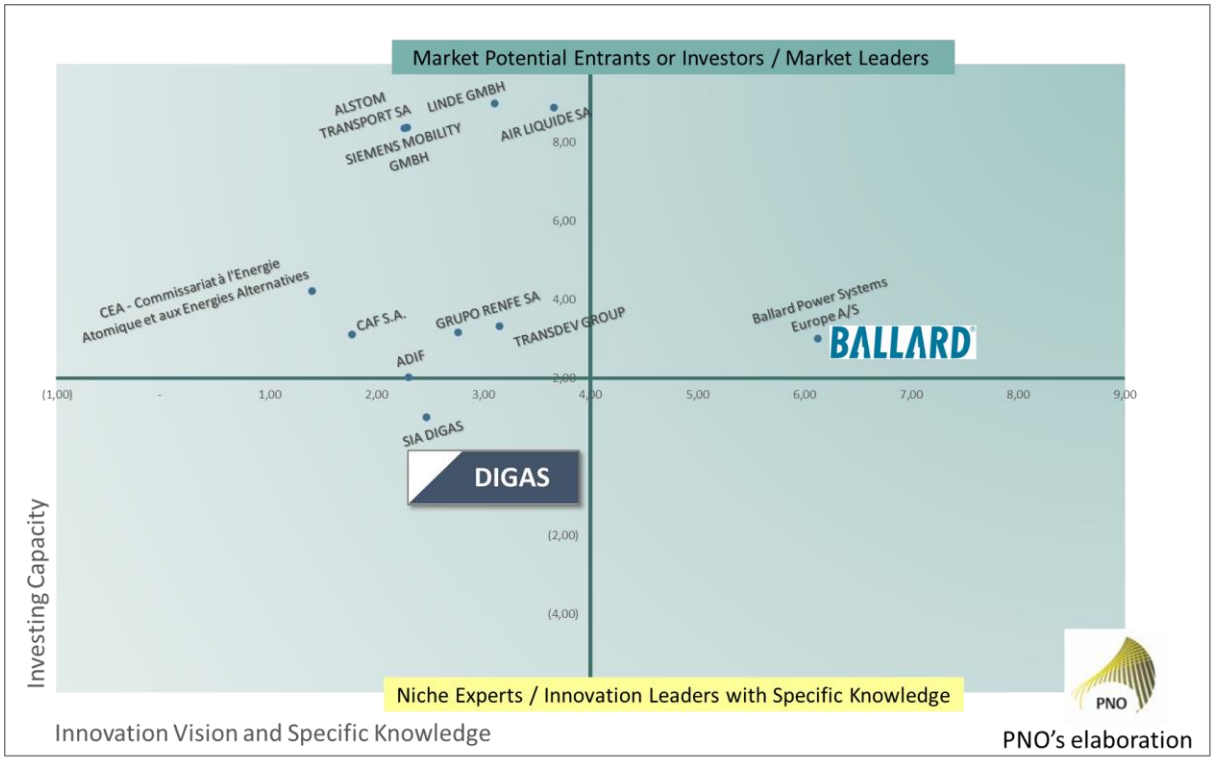

Figure 30: Main actors in alternative fuels and vehicles for rail transport.

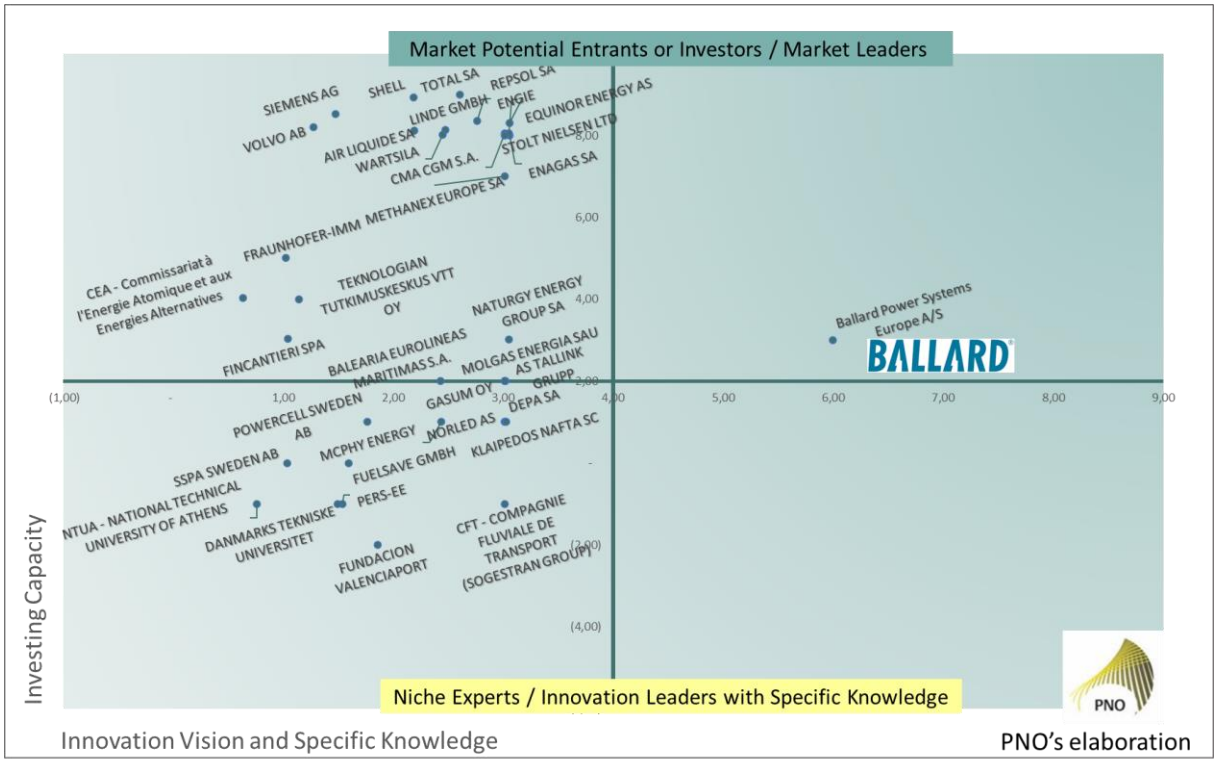

Figure 31: Main actors in alternative fuels and vehicles for waterborne transport.

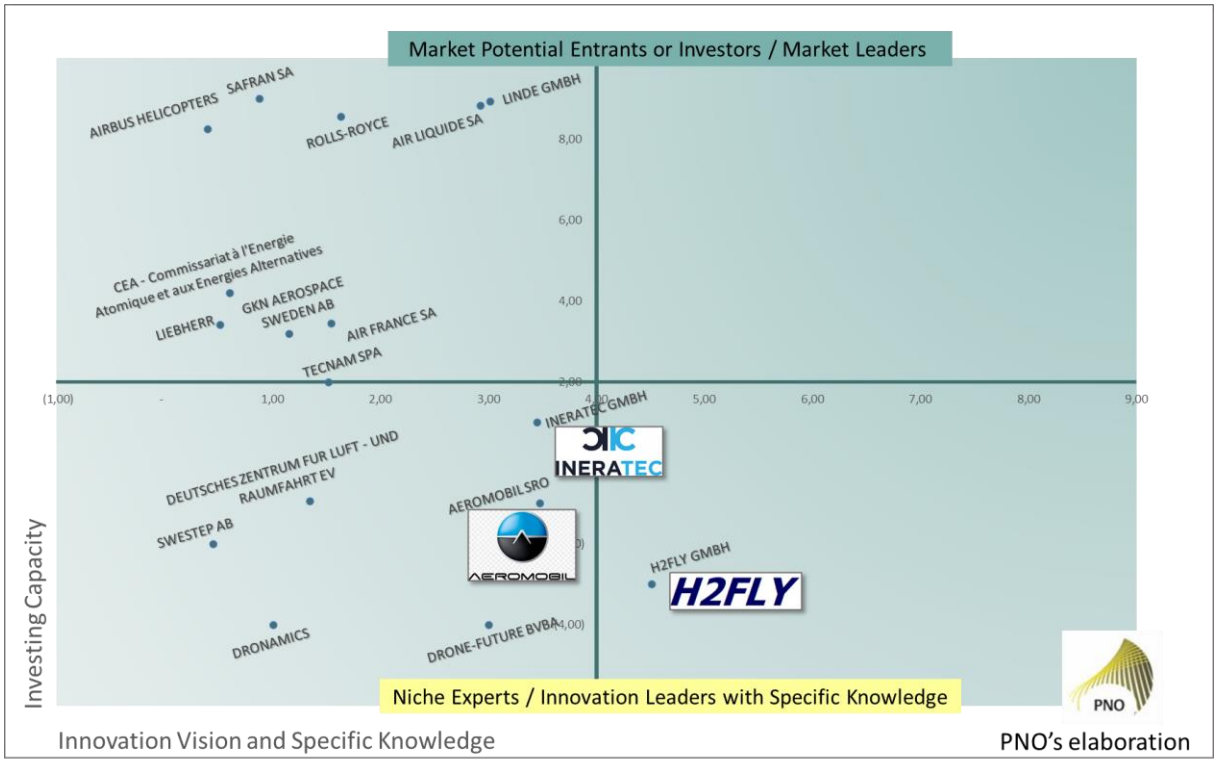

Figure 32: Main actors in alternative fuels and vehicles for air transport.

6.4. MANAGEMENT SYSTEMS AND DIGITALISATION

As for digitalization technologies (AI, ML, big data and similar) and management systems (ITS and other management tools), the maps below show many start-ups and emerging companies that are driving innovation and that are in a transition phase from the left to the right of the maps, in the face of the big players of the various modes of transport ready to integrate these technologies into their already advanced systems and products.

The **road transport** is the unique transport mode for this category of technologies which sees a company in the right part of the map (***Figure** 33*): Easymile, a joint venture formed by Ligier Group, a French manufacturer of micro-cars for innovative mobility, and Robosoft, a French provider of robotic and autonomous solutions for various sectors, which has developed the most-used **fleet management system for autonomous vehicles** in both passenger transport and logistics. In addition to Easymile, the map shows two interesting SMEs, GoOpti and Transmetrics, which are next to the most innovative area in the bottom-right quadrant. GoOpti has developed an innovative method for **booking via app the transport to airports**, while Transmetrics has developed an advanced **AI platform to optimize logistics** and they both can be considered as emerging companies and, probably, future technology providers in this category.

In the **rail transport** map (***Figure** 34*), instead, there are no organizations with a relevant rate to be present in the most innovative quadrants of the map and in general there are few that stand out from the others. However, it is possible to highlight OTIV, a Belgian start-up which is developing world-class **algorithms and high-performance industrial-grade computing** unit able to upgrade rail operations and transportation to become safer and more efficient, teaching vehicles on rails to **drive autonomously**, and it can probably fall into the “technology provider” category in the near future.

Even the **waterborne transport** map (***Figure** 35*) shows few players that are interested in or are developing innovative management systems for maritime/inland transport. The upper-left part of the map shows the big players which develops relevant technologies in this field, such as Kongsberg Maritime, ABB, Indra Sistemas, etc…, and the main tier-1/tier-2 of the marine sector resulted from the analysis, such as Wartsila, Volvo, Siemens. In the bottom of the map, instead, the focus can be on Awake.AI, a start-up that fosters building an ecosystem focusing on developing **smart ports and autonomous shipping** and which can fall into “technology provider” category in the near future.

Finally, the **air transport** map (***Figure** 36*) shows that the big players in air transportation sector are interested in investing in management technologies to reduce their environmental impact, together with the leading companies which develop and provide this type of solutions. However, no one of the big players we’re referring (upper part of the map) has an innovation rate that stands out from the others. On the other hand, Dronamics, a start-up with offices in Bulgaria and the UK which is developing the world-leading **cargo UAV** "The Black Swan" - a revolutionary fixed-wing unmanned aircraft that can transport 350 kg at a distance of 2,500 km cheaper than any aircraft in existence. It is possible to hypothesize that in the next few years the start-up can completely fall into the right side of the map.

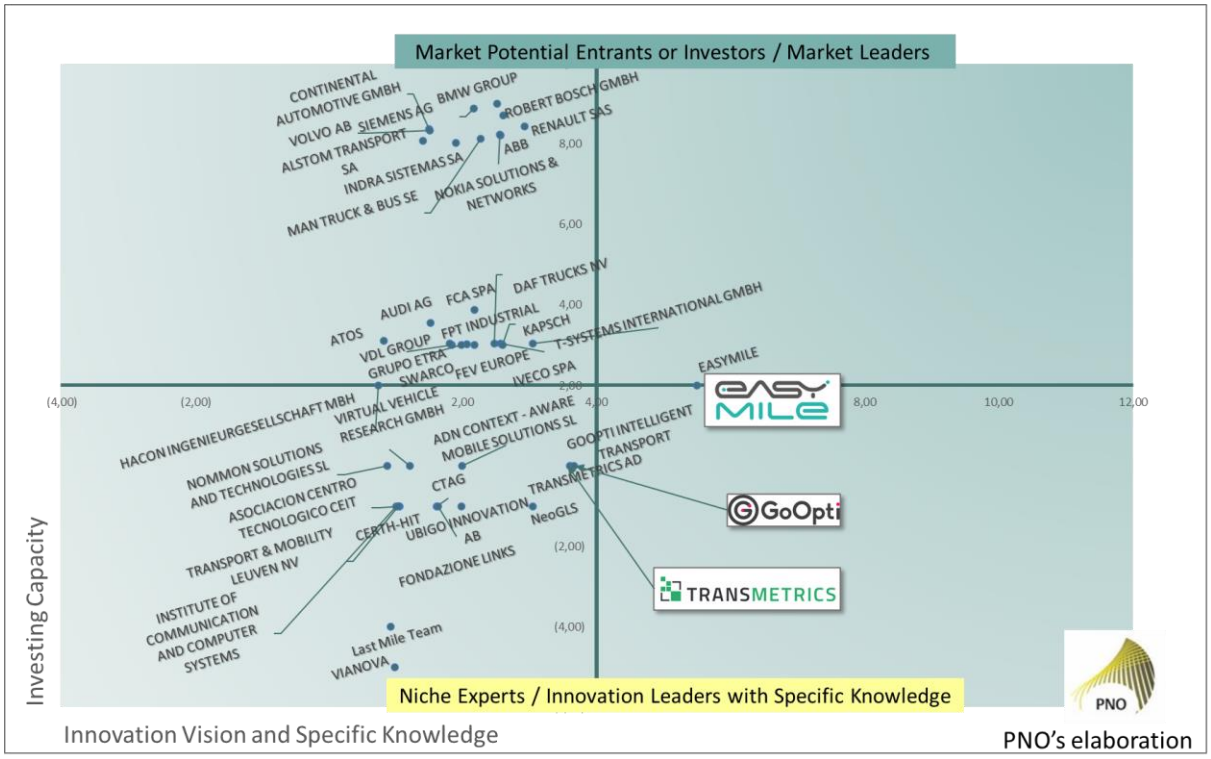

Figure 33: Main actors in management systems and digitalisation technologies for road transport.

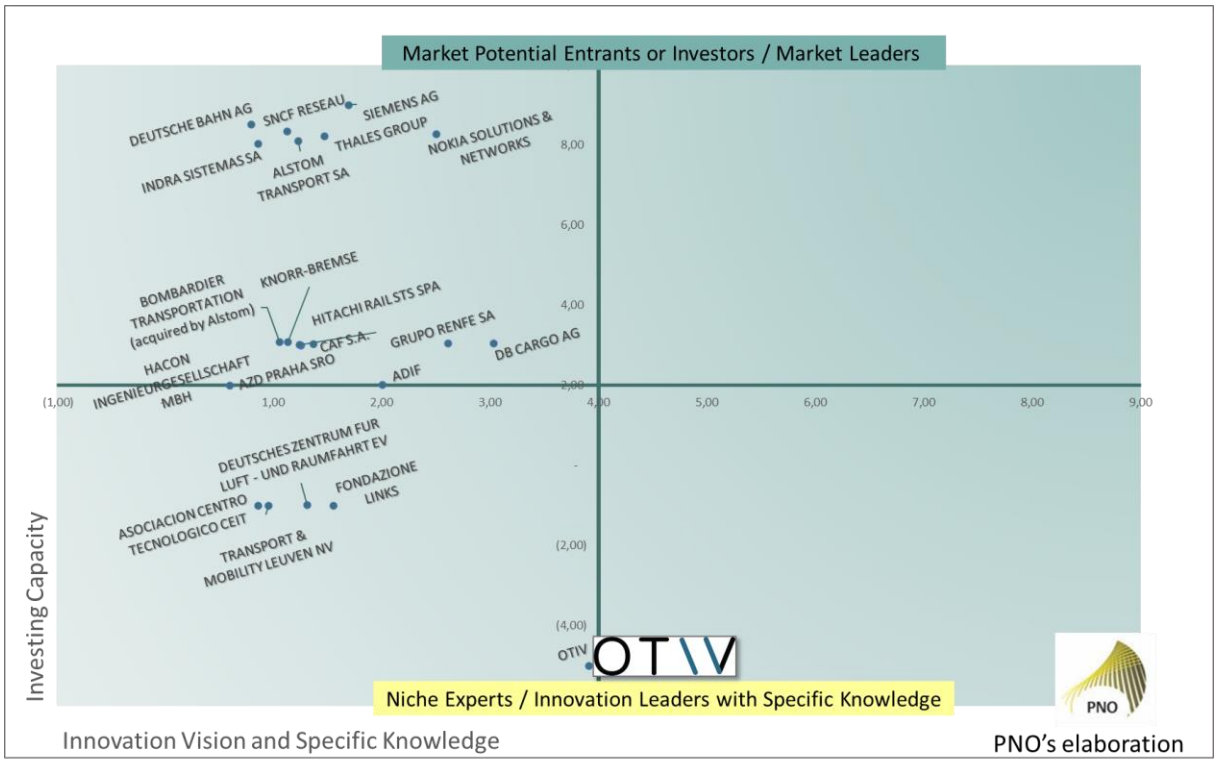

Figure 34: Main actors in management systems and digitalisation technologies for rail transport.

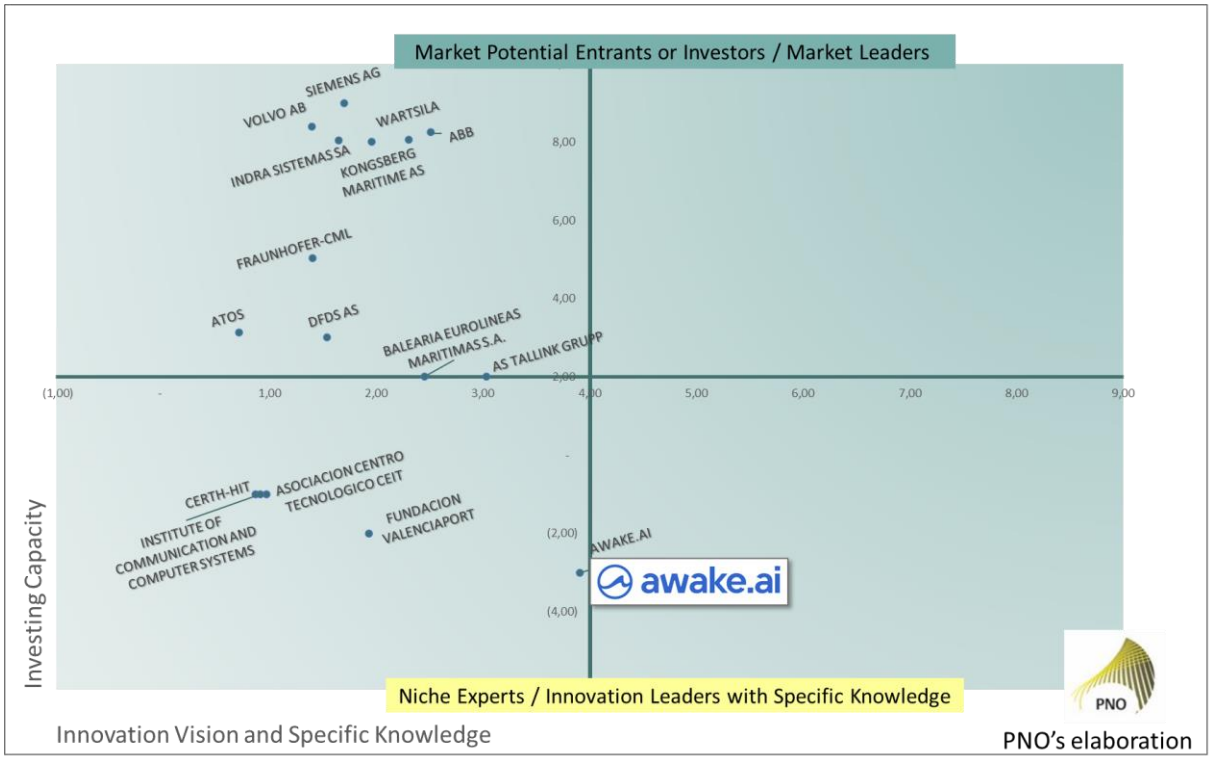

Figure 35: Main actors in management systems and digitalisation technologies for waterborne transport.

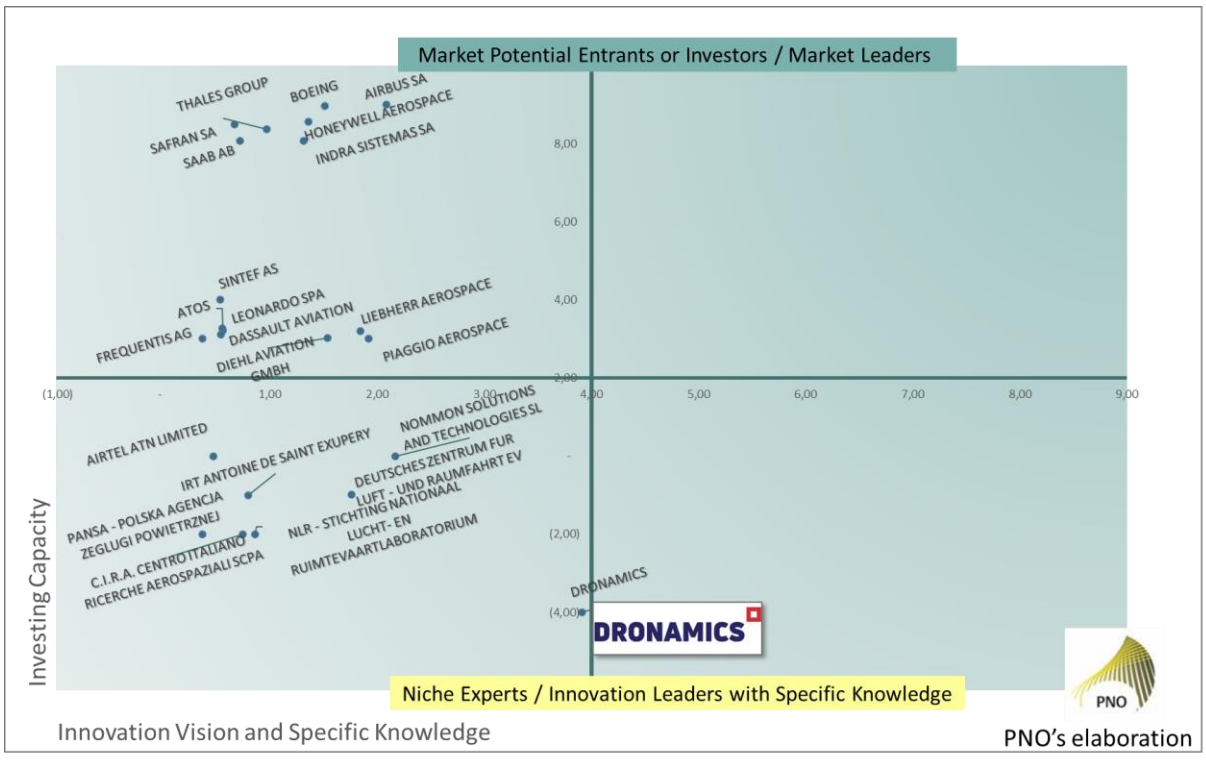

Figure 36: Main actors in management systems and digitalisation technologies for air transport.

6.5. INNOVATIVE MATERIALS

The maps created for the innovative materials solutions highlight an overall less crowded ecosystem. The number of relevant organisations, in fact, in this field is lower than the other technologies analysed for the different mode of transports, except for air transportation.

Among these few companies, Hydrogenious Technologies GmbH, can be highlighted. They are an SME which has developed an innovative **Liquid Organic Hydrogen Carrier (LOHC)** for hydrogen storage and transportation, and which has the highest innovation and affinity index in both **road** (***Figure** 37*) and **rail** (***Figure** 38*) transport modes. In the same modes of transport maps, another company can catch our attention: Hysilabs, which also produces an **innovative hydrogen carrier**, called HydroSil, and which is located in the middle part of both maps, thus being able to reach Hydrogenious on the right side in the near future.

The map related the **waterborne transport** (***Figure** 39*) sees even fewer relevant players, among which Umicore stands out thanks to its high investing capacity and innovation/affinity index. Umicore, indeed, is a large enterprise leader in production of **catalysts to eliminate NOx** from vessel engines of all sizes and can be considered a market leader in the sector.

The map of **air transport** (***Figure** 40*) is the unique for this technology with a good number of organisations represented. In fact, there are several organisations (big players such as Airbus, Safran, GE Aviation, etc.) which are interested in or are developing materials to reduce the weight of aircrafts parts or components and consequently reduce the emissions of air transport industry. However, the map shows that all the organizations are concentrated on the left side, testifying that there is no one company in this field that stands out from the others regarding the degree of innovation. It is a segment hold by established leaders, but the position of Composite Research Srl can be noted, which developed and patented MadFlex, a technology that allows the creation of **ultralight multilayer panels**, and which according to our calculation index is the one on the far right of the map.

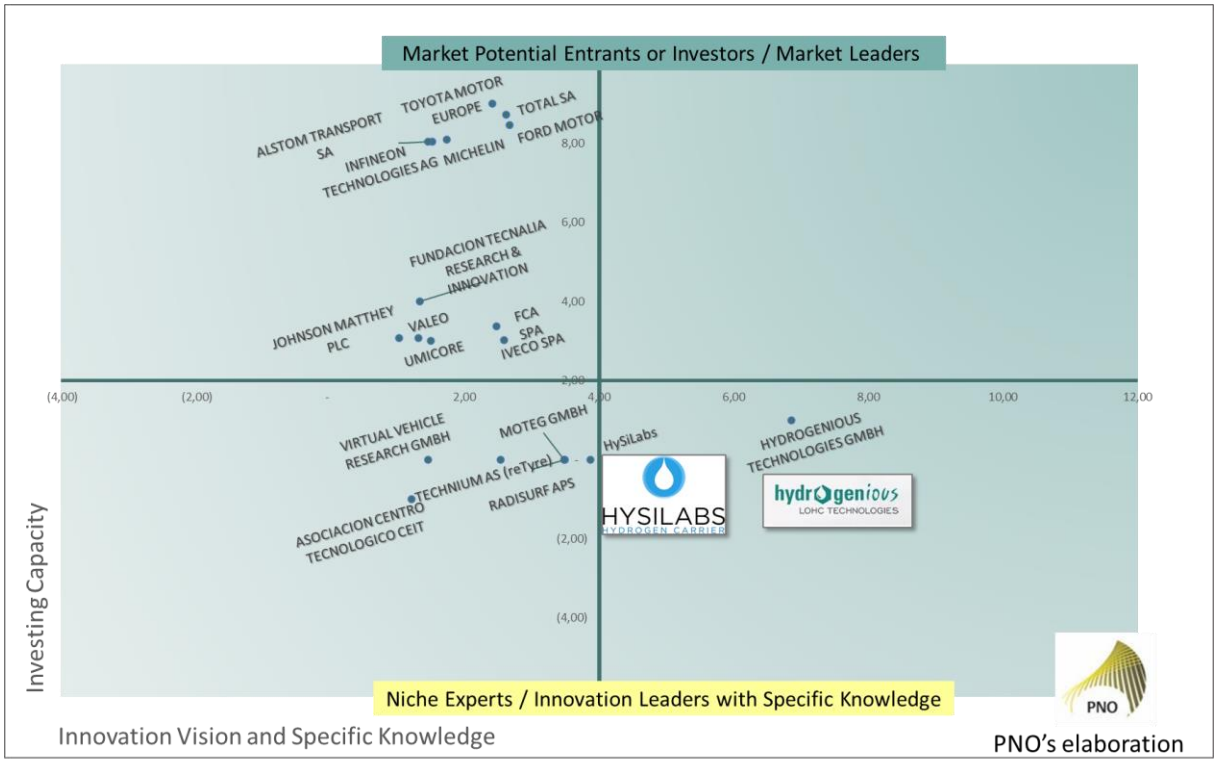

Figure 37: Main actors in innovative materials solutions for road transport.

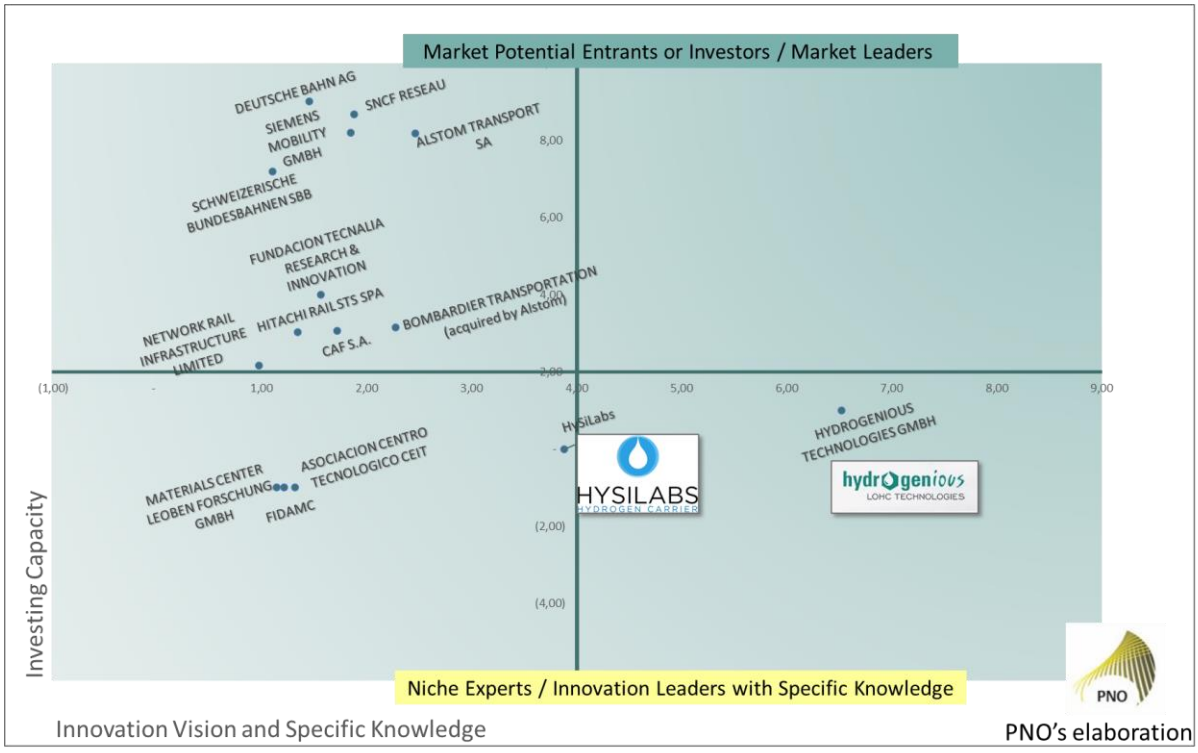

Figure 38: Main actors in innovative materials solutions for rail transport.

Figure 39: Main actors in innovative materials solutions for waterborne transport.

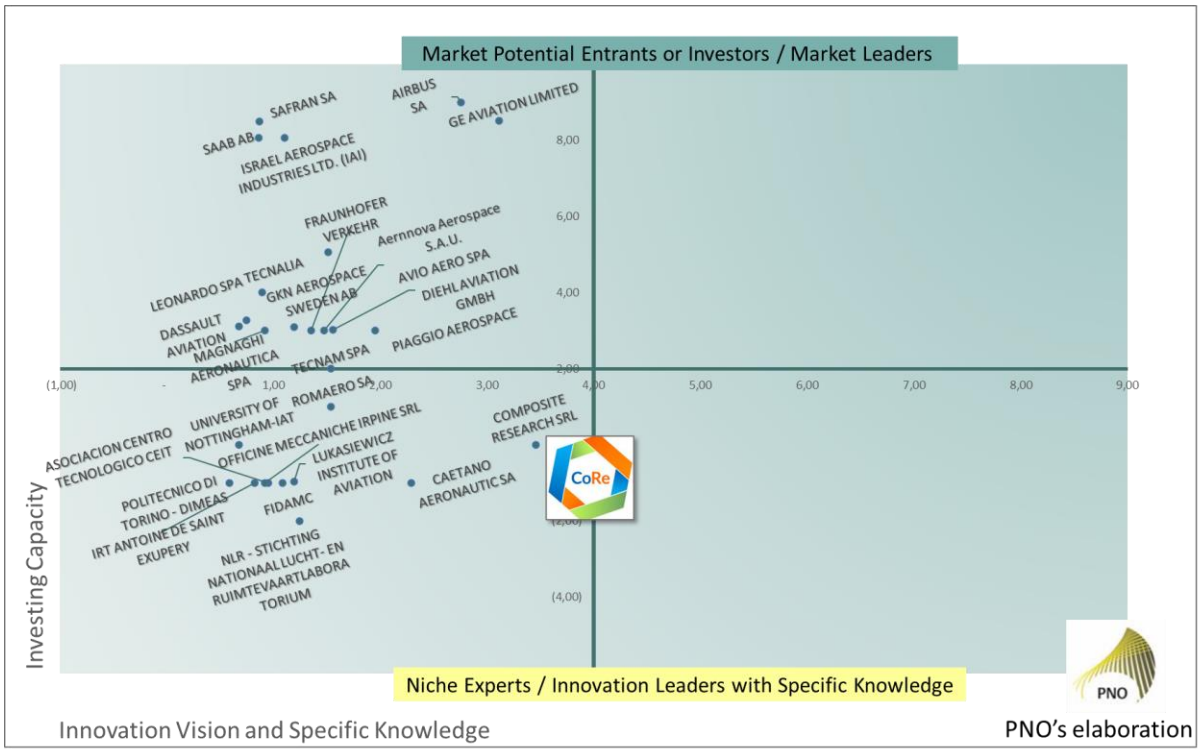

Figure 40: Main actors in innovative materials solutions for air transport.

6.6. OTHER TECHNOLOGIES

This section will show the maps of the organizations related to the other technologies considered: *smart solutions, transport & logistics operations, vehicle design, vehicle technology, other*. These technologies have been put together (and divided by mode of transport) because they do not have many other relevant players based on our selection criteria.

The **road transport** map (***Figure** 41*) highlights two SMEs on its right side: Nuwiel Gmbh, which has developed an **electric trailer to transport goods with automated brake and acceleration system for bikes**, and Fuelsave GmbH, which develops several solutions to increase efficiency and lower the impact in the environment, such as highly efficient **new type of engine and other solutions able to save fuel**.

In the **rail transport** map (***Figure** 42*) there are no organizations that are particularly distinguished from the others. In fact, the map shows the main big players in rail transportation interested in and potentially buyers of new technologies capable to lower emissions in the sector and does not show emerging companies that can provide innovative solutions, with the exception of large companies such as Siemens AG and Thales Group.

Even in the **waterborne transport**, the number of small companies and organisations shown is limited, but it is possible to highlight SMEs which have fallen into the right side of the map (***Figure** 43*): Norsepower Oy Ltd, which develops **rotor sails** able to make vessels fuelled by wind, and Bound4blue SL, which is also an engineering company with the mission to deliver **automated wind-assisted propulsion** systems as a turnkey solution for all shipowners and shipping companies looking for a reduction in fuel costs and pollutant emissions.

The map of **air transport** (***Figure** 44*), instead, shows the usual big players in the air transport sector in the upper part, while in the lower part some organizations that conduct research and innovative engineering studies as well as some aeronautics engineering SMEs. The company that stands out from the others, with an innovation rate such as to make it fall into the right part of the map, is GKN Aerospace Sweden AB, company which is a major supplier of **integrated composite structures**, offers one of the most comprehensive capabilities in high performance metallics processing and is the world leading supplier of cockpit transparencies and passenger cabin windows.

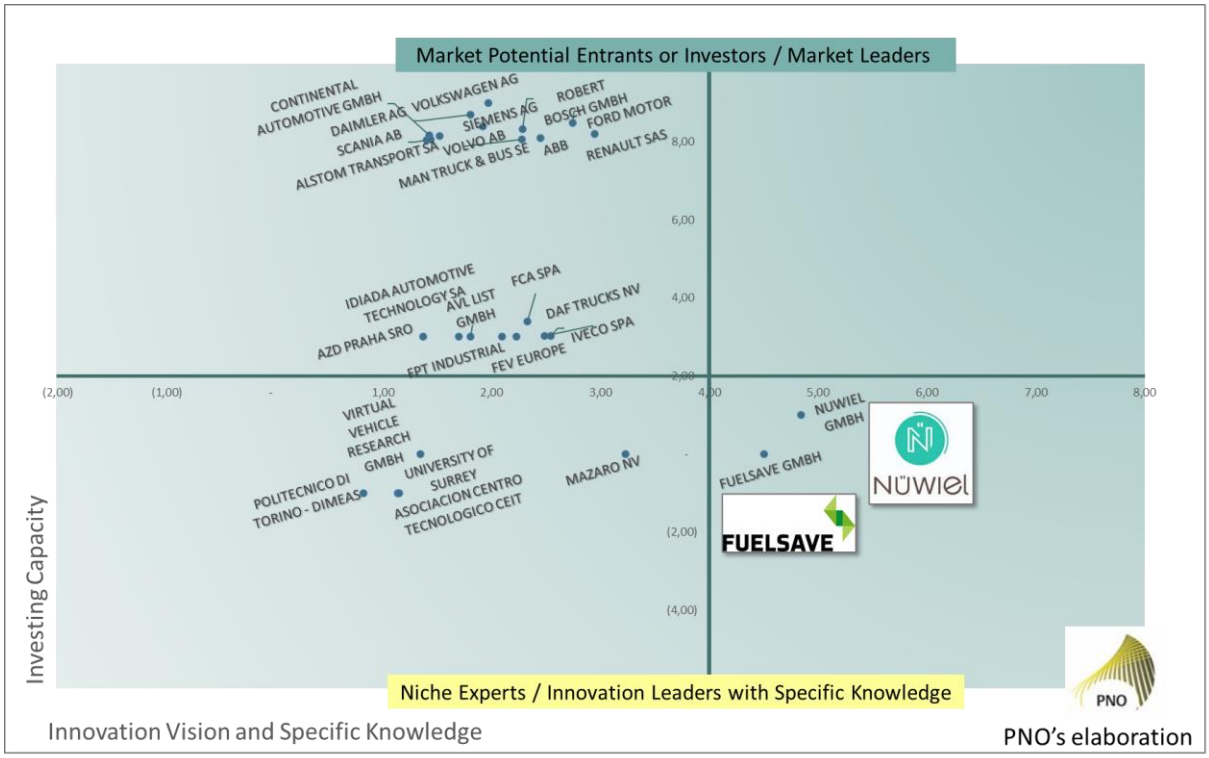

Figure 41: Main actors in other technologies aiming to lower emissions for road transport.

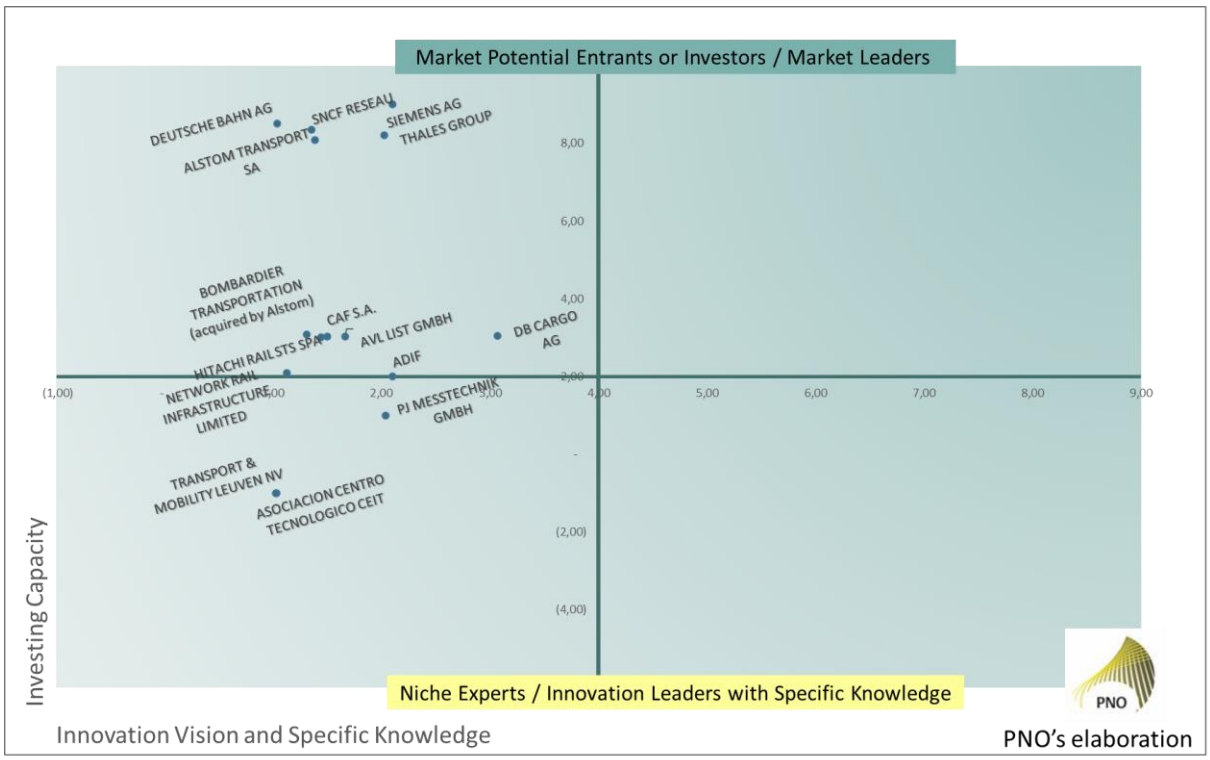

Figure 42: Main actors in other technologies aiming to lower emissions for rail transport.

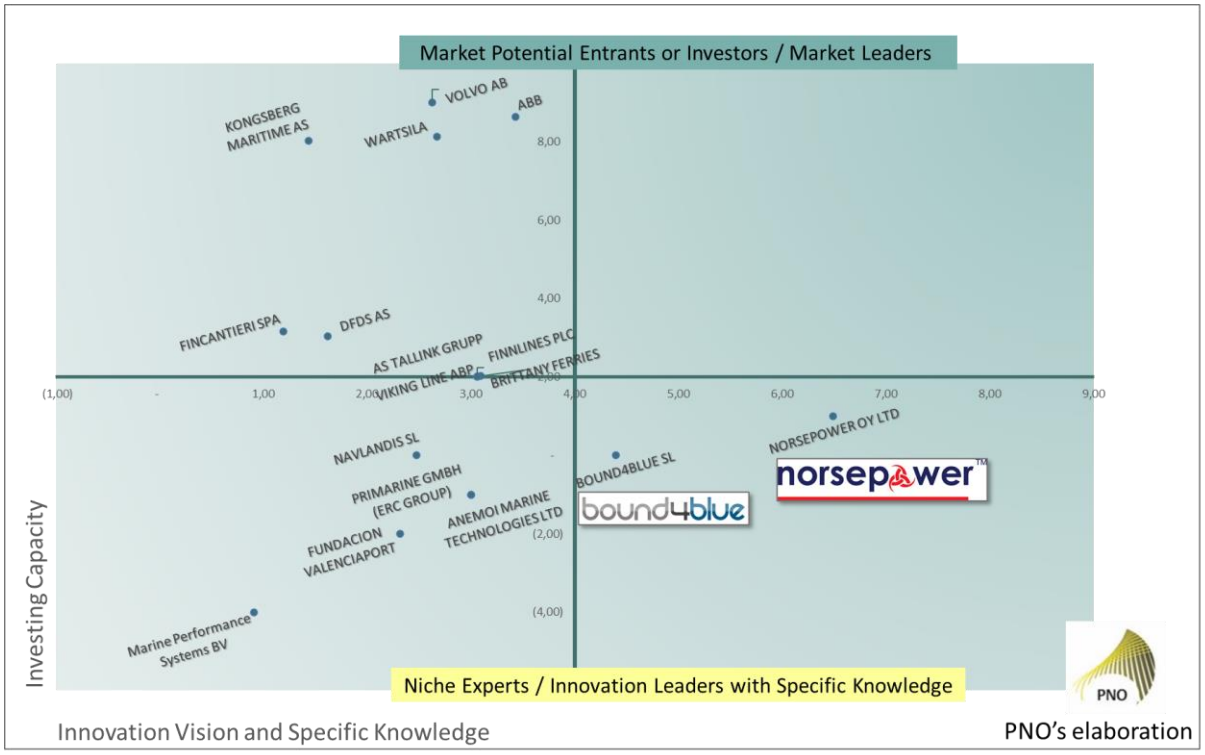

Figure 43: Main actors in other technologies aiming to lower emissions for waterborne transport.

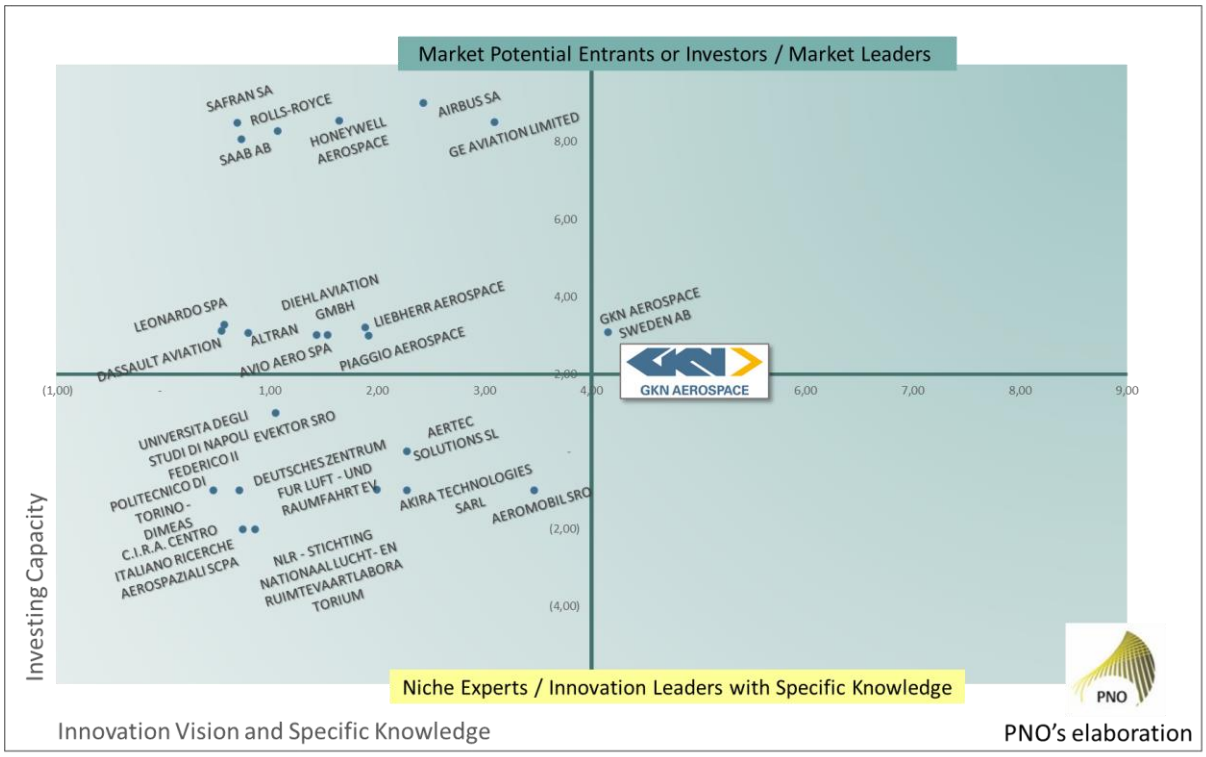

Figure 44: Main actors in other technologies aiming to lower emissions for air transport.

6.7. TECHNOLOGIES FOR MODALITY TRANSPORT

Finally, a separate map was built that included the main actors of combined transport (**modality transport**) because the technologies that favour its implementation can be considered different from those applied for other modes of transport. The map, shown below, allows the identification as most active and innovative organisations those which manage hubs and terminals (CSP Iberian Valencia Terminal Sausa, Duisport, PSA Antwerp, Interporto Padova, etc.), provide intermodal transport (Kombiverkehr, Hupac, Mercitalia, ZSSK Cargo, etc.) and some start-up/SME which develops technologies to favour the shift from a mode of transport to another. Among these, Cargobeamer AG can be highlighted, an SME which provides a **smart, reliable and environmentally friendly system for intermodal transport** of all types of semi-trailers by rail and falls into the right part of the map.

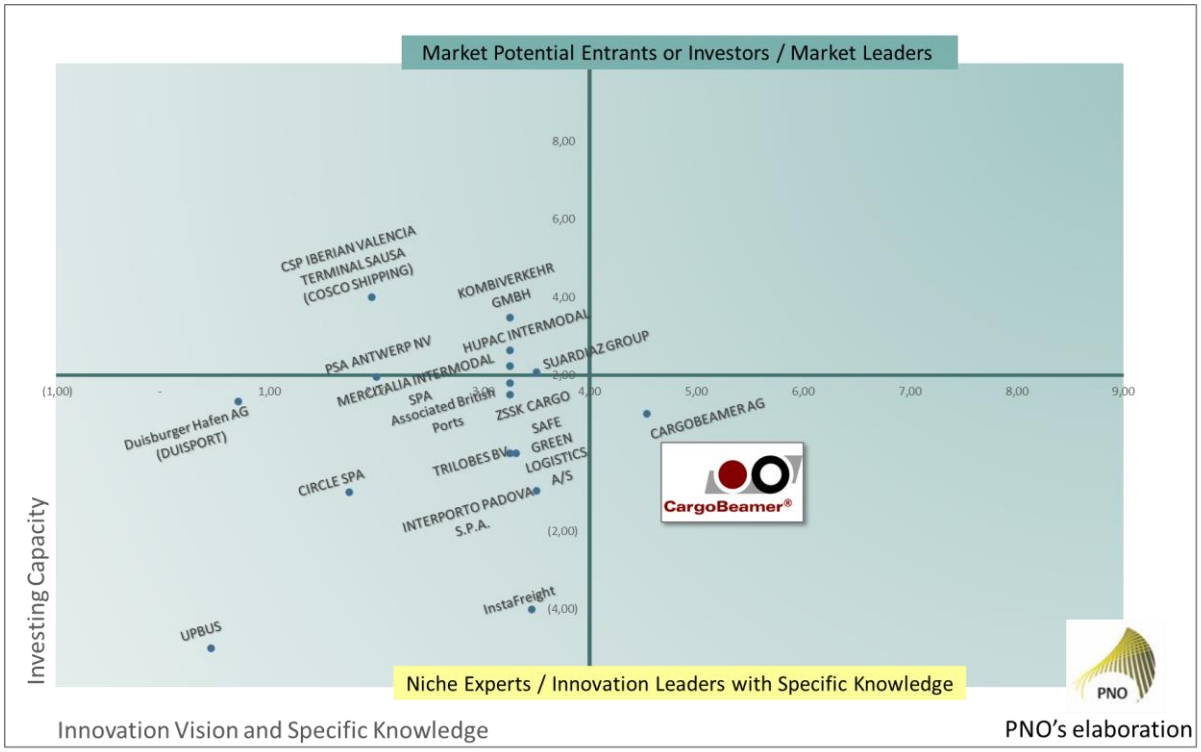

Figure 45: Main actors in technologies able to implement modality transport.

7. CONCLUSIONS

This report clearly reflects on the complexity of the transport and mobility sector, while it at the same time clearly shows how vibrant it is while tackling its future sustainability. The ENTRANCE community will therefore be enriched by the possibility of contacting the wide range of identified stakeholders.

The main figures of this assessment considering the main profiles of the platform are:

- A total of **945 organisations** can be considered under the SUPPLY category.
- A total of **1013 organisations** can be considered under the DEMAND category.
- A total of **217 investors** have been identified as potential INVESTORS.

It is noticeable that all these entities are nowadays, or have been in recent years, active on innovation activities oriented to decarbonising the transport of goods and passengers.

This assessment will become a practical yet useful guidance for identifying the entities that could represent the early adopters for the ENTRANCE platform. The approach will combine the knowledge collected by performing this assessment with the strategy developed for the project and collected under deliverable 6.1 ‘Communication and Dissemination Plan’.

8. BIBLIOGRAPHY / REFERENCES

Ref1. European Commission. (2021). *COMMISSION NOTICE - Guidance on Innovation Procurement.*

Ref2. European Commission. (2021). *Shaping Europe's digital future - Pre-Commercial Procurement.*

9. ANNEX 1 – PROJECTS AND PATENTS IDENTIFICATION

The identification of R&D&I projects and patents has been performed on PNO's proprietary databases (e.g. on the Wheesbee intelligence platform (link)): each search is based on identified keywords as shown below.

All the projects funded by the listed programmes have been taken into account, considering the following boundaries:

- The project aims to lowering emissions in Transport and Mobility sector (e.g. projects regarding only to improve security in T&M sector are excluded);
- Technologies ready-to-market or TRL>6 for Smart, Green and Integrated Transport's H2020 call;
- Starting date from 01/2014 onwards.

The patent search has been instead performed considering the following boundaries:

- Patent with focus on *lowering the environmental impact in the transport and mobility sector*;
- Patent with *priority claim in Europe* (the technology has protection in Europe or in one of the European countries, also if it is patented by a non-European organisation);
- *European applicants or applicants with offices in Europe*;
- Patent with *priority claim date from 01/2014 onwards*;
- CPC codes regarding the field of lowering the emissions in the transportation sector: ***B60*** (Vehicles in General); ***B61*** (Railways); ***B62*** (Land Vehicles for Travelling otherwise than on Rails); ***B63*** (Ships or other Waterborne Vessels; Related Equipment); ***B64*** (Aircraft; Aviation; Cosmonautics); ***E01*** (Construction of Roads; Railways; or Bridges); ***F01*** (Machines or Engines in General); ***F02*** (Combustion Engines; Hot-Gas or Combustion-Product Engines Plants); ***F03*** (Machines or Engines for Liquids; Wind, Spring, or Weight Motors; Producing Mechanical Power or a Reactive Propulsive Thrust); ***F16*** (Engineering Elements and Units); ***F17*** (Storing or Distributing Gases or Liquids); ***F23*** (Combustion Apparatus; Combustion Processes); ***H02*** (Generation; Conversion or Distribution of Electric Power); ***Y02T*** (Climate Change Mitigation Technologies related to Transportation).

Table 7: Table of keywords

Sector/Objects	**Land transport, Road transport, Logistics, Maritime transport, Seaborne transport, Sea transport, Waterborne transport, Inland waterways transport, Short-sea transport, Air transport, Rail transport, Railways, Locomotive, Train, Vessel, Ship, Shipping, Ferry, Boat, Car, Trailer, Truck, Bus, Aircraft, Tanker, Infrastructure, Freight transport, Mobility**
Actions	Optimising, Improving, Reducing congestion, Enhancing, Reducing fuel consumption, Extending battery lifespan, Traffic controlling, Synchronising, Data sharing, Connecting, Increasing, Reducing weight
Solutions	Electrification, Electric vehicles, Fuel cell, Hydrogen, Liquid hydrogen, Alternative fuels, Biomethane, LNG, CNG, Bio-based fuels, Electric charging, Fast charging, EV range extender, Management systems, Smart charger, Internet of Things, ICT-based solution, Intelligent traffic system, Artificial intelligence, Intermodality, Smart system, Intelligent system, Lightweight material, Composites, Big data, 5G, Multimodality, Automation
Benefits	CO2 free, Zero emissions, Low fuel burn, Green transport, Low-emissions transport, Intelligent transport, Near to zero emissions, Low environmental impact, No pollutants, Decarbonization

10.ANNEX 2 – PROJECTS IDENTIFIED

The list below, provides the acronym of all the projects that have been selected for this assessment. The total number of projects is 556. This list includes the results obtained by analysing projects under the programmes EIC Accelerator for SME (ex SME Instr.), LIFE, COSME (Competitiveness for SME), CEF Transport, EMFF (European Maritime and Fishery Fund), H2020 Smart, Green and Integrated Transport and INTERREG 2014-2020. It excludes other results that were found by desk research not corresponding to these programmes.

CASSIO
FUTrailer
HyLIZER
IMPOWER2X
MOBHYLE
Simacan LINK
DazePlug
EEN HHSH
GREENing the BLUE
Cluster ACT
FreShER
SpaceTech4Sea
ZboxBlueLogistics
LIFE_SC
LIFE ASPIRE
LIVE ECOTRAVID
LIFE GySTRA
TankSensor
LIFE LANDFILL BIOFUEL
LIFE STEAM
LIFE SAVE
LIFE GYR
U-MOB LIFE
MILE21-Life
i-SharE LIFE
LIFE BrennerLEC
LIFE GYM
BIOHEC-LIFE
EP TENDER
ZapGoCharger
Adaptcontrol
comAUX
Raven
reinventing the tyre
QualE-fly
SMASH
X-CAP
LIFE METHAmorphosis
BATTERY PLUS
AVILOO bcheck
MAXITHERM
Capcooltech
YawSTOP
Triboconditioning
WHIITE
Seabubbles
RebelRocket
SmartRunway
SkySaver
SIADE SaaS
UNITE
SKLCarbonP2
SulPure
SAFE-CTS
RadiBond
TrafficWise
SMARTER-2
TRUFUS
INCH
PolyHalter
Hydrogenlogistics
H2Engine
Project Racoon
Hailo-8
ONO
HYDROSIL
Transmetrics
OPTELA
Matrix Charging
LiveIT
HPCForEVs
INTRANSYS
NYSMART
Airport IQ
Agro Highway
FREEWAY
GlobalBLED
FastPrk-2
Echaea
CONCEPT
Circlenergy
BITRIDE BIKE SHARING
Addionics
GoOpti
CLOUD-VAS
CREEV
EHSTACK
BUSUP
LIFE 'N GRAB HY!
PROMETHEUS-5
LIFE BIOBCOMPO
CAPOWER
4FOLD Phase 2
AINARA
REBOOT
LIFE CLINSH
LIGHTYEAR
Cryoshelter
AQUASONIC DIESEL
LIFE CIRCforBIO
ACEP
FENIX
Decarbonised passenger transport at European Airports
Connection of the Budapest-Arad railway line to the multimodal hub at Budapest Airport
Implementation of Functional TWR at Göteborg Landvetter Airport
Skavsta Access 2.0
Croatia Airlines joining the EGNOS family
AIA's evolution into a high-performing node within the European ATM network
Deployment of SESAR solutions in TAP's fleet
Implementation of Voice over IP (VoIP) in the Barcelona Area Control Centre
Watertruck+
Bridges and culverts in the Münster city section of the Dortmund-Ems canal
New multimodal terminal of the Port of Strasbourg/Lauterbourg
Studies of river access to Port 2000
Breakthrough LNG deployment in inland waterway transport
Core Network port Regensburg - improving accessibility
LNG for shipping and logistics in Europe
LNG Logistics
PAN-LNG-4-DANUBE
Trimodal Linz port - Rail connection and port enhancement
Port-Liner, "zero emission" ships for inland waterways
Upgrade of the combined cargo terminal rail infrastructure at the Port of Moerdijk
Upgrading infrastructure at Seville Port to improve interconnection between the waterway and rail and maritime transport
Port development of the Ports of Mulhouse-Rhine
Electrification of the Seine Axis: onshore power and water supply for fluvial units
Upgrading infrastructure for waterborne operations at three locations on the Maas and Albertkanaal
GAINN4SHIP INNOVATION
Cleanport
Nordic Maritime Hub
The northern ScanMed ports - Sustainable maritime links
Twin-Port 2
ReaLNG
HEKLA
STM Validation Project
Back from Black
Environmental compliance and upgrade of the North Sea MoS Felixstowe-Vlaardingen
Biscay Line - Multiple port Finland-Estonia-Belgium-Spain long distance MoS, relevant to many core network corridors
Zero Emission Ferries - a green link across the Oresund
Planning, construction, demonstration and market roll-out of small-scale liquefaction and supply facility for Liquefied Biogas (LBG) as alternative fuel for the transport sector
Upgrading and sustaining the competitive Germany-Finland (RoRo multiple ports loop) Baltic MoS link
Rostock-Gedser Motorway of the Sea - Part 2
Poseidon-Med II
eImpact
GAINN4MOS
Study and deployment of integrated gas & water cleaning system and biofuel-MGO blend for Atlantic Corridor upgrade

Installation of gas & water cleaning system for the upgrade of the Atlantic Arch
CORE LNGas hive
INES
GAINN4CORE
DOOR2LNG
Bothnia Bulk
Blue Baltics
S/F SamueLNG for a Blue Atlantic Arch
EG LNG bunker vessel
SuperGreen
LNGHIVE2
GAINN4MID
TWIN PORT III
LNGHIVE2 VESSELS DEMAND
BlueHUBS
Cargo capacity upgrade and LNG bunkering Swinoujscie – Ystad maritime link
EU Green Loop
Eastern Baltic Hub - Improving port access and hinterland connection of the HaminaKotka port in the ScanMed corridor
Ravenna Port Hub: infrastructural works
GAINN4SEA
Intelligent Sea
GREEN C PORTS
iTerminals 4.0
SMART-C
Upgrade of the combined transport RSC terminal Rotterdam
Feasibility study and technical documentation of the intelligent cargo road traffic management system in the port of Gdynia
Smart, Electronic and Autonomous Multimodal Transportation System and Port Operations
Blue Port Kiel
ALFION
LNGHIVE2 Santander
LNGHIVE2 Vessels Demand2
EALINGWorks Valenciaport
LNGHIVE2 Barcelona
LNGHIVE2 Algeciras
Sea Li-ion
EALING
Upgrade of the Kapellskär-Naantali (MoS Finnlink) Baltic sea bridge
Upgrading the port of St Malo for safe, secure and sustainable RoPax traffic development
Upgrading works for a sustainable growth
New RoRo ramp at Port of Dunkirk: securing & improving environmental performance of the traffic on the NS-Med corridor
H2Bordeaux
Hansalink 2
Naples LNG Coastal Depot
High Voltage Shore Connection (HVSC) for the TEN-T Core Grand Harbour Port, Malta – Action A
Bio2Bunker
Preparing the port of Karlshamn for the next generation of large Ro-Pax vessels and provision of onshore power supply
Gävle Port - Electrified railway connection
Pilot deployment of a smart (bio-) LNG/CNG network in Flanders, investigating an innovative "mobile CNG pipeline" concept
Safe and secure infrastructure in Flanders
FAST-E (DE/BE)
MECOR
NEXT-ITS 2
EU ITS Platform
COHRS
URSA MAJOR 2
GREAT
CROCODILE 2
UNIT-E
Arc Atlantique Corridor phase II
Connect2LNG
H2Nodes
BESTWay
FAST-E (SK\CZ)
Development of LNG/L-CNG network in Finland
EAS-HyMob
TIMELY
Development of LNG infrastructure in Poland - the pilot project
Study of innovative natural gas solutions for road transport in north west Europe with pilot deployment in UK and the Netherlands
CITRUS
C-ROADS CZECH REPUBLIC
Studies for construction of the D52 motorway, Bavory– CZ/AT border section
Electric vehicle fast charging backbone network Central Europe
C-Roads-Germany
Deployment of autogas refuelling stations in different metropolitan areas between Spain and Portugal
SolC-ITS
POSTLowCIT
INMAB
SiLNGT Small Scale Transport
InterCor
EAST-E
Creation of an LNG road haulage market in a smart & quick way
Models for Economic Hydrogen Refuelling Infrastructure
ULTRA-E
CIRVE
EVA+
LNG motion: Fuelling trucks with LNG/CNG along the Core Network
AUTOCITS
C-Roads France
Deployment of autogas refuelling stations in different metropolitan areas between Spain and Portugal
CIRVE_PT
CNG ROMANIA
C-Roads Slovenia
NCE-FastEvNet
C-Roads Belgium/Wallonia
Modernisation of the I-8 Kalotina–Sofia Ring Road, from km 1+000 to km 15+500 and stage link
URSA Czechia
LNG4Trucks
Study for a pilot CNG filling station network
C-Roads Spain
NEST-ITS 3
URSA MAJOR neo
High speed electric mobility across Europe
ECO-GATE
SOCRATES2.0
H2Benelux
BENEFIC
CONCORDA
E-VIA – FLEX-E
Comprehensive fast-charging corridor network in South East Europe
NEXT-E
URBAN-E
MI2
C-ROADS ITALY
GAINN4MED
Upgrading of Modal Interconnection on Malta's TEN-T (road) Core Network: Marsaxlokk-Luqa-Valletta (Marsa - Action B1 and parts of Actions B2, B3 and B4)
BIOLNG4EU
LEM project
C-ROADS Portugal
Nordic Hydrogen Corridor
Traffic Management Integration in the National Traffic Management Centre 2
FueLCNG
Liquiefied BioGas: Fuelling renewable transport in the Visegrad countries
EUROP-E
H2Bus Europe
Central European Ultra Charging
MEGA-E
BioLNG EuroNet
MULTI-E
Blue Stations Network
Zero Emission Valley
LAST MILE
CORRI-DOOR²
Olympic Energy
Green Connect - A public CNG network
CRE8
AMBRA-Electrify Europe
Snam 4 Mobility
REMETBUS2 Rotterdam
Zero emission public transport services for Schiphol Amsterdam Airport and along the core corridors.
PURE H2
Building a charging infrastructure for electric vehicles in order to decarbonise public transport in Warsaw
Svealand Public Transport infrastructure roll-out for biogas and electric buses
C-ROADS Greece
C-ROADS Austria 2
NordicWay 3 - Urban Connection
InDID
Mobilidata
Construction of the Lefkosia South Orbital Motorway - Phase B3
Grupo Ruiz Clean Bus Fleet
ISM
Development of a network of alternative fuel technology in the Atlantic and Mediterranean corridors across Spain
ECO-Net
Total High Power Charging
Planning and design phases of TEN-T priority route improvement in Donegal
EV Charging Italy
EV Stations 2.0
Zero Emission Buses for public transport in Amsterdam, The Netherlands
RESTART
Development of Sofia railway junction: Sofia-Voluyak railway section
Knappenrode-Horka-German/Polish border section: upgrade, electrification and ETCS planning

40-CONTECH
MEDAS 3.0
ETCS: development of the generic design Level 2, key catalyst for the roll-out of ETCS2 in Belgium
Coordinated and harmonised implementation of rail freight corridors and freight and passenger telematics applications
ETCS Petrovice u Karvine-Ostrava-Prerov-Breclav
ERTMS Deployment on the German part of the Rhine-Alpine Core Network Corridor
Support and coordination of the Rhine-Alpine Rail Freight Corridor for its long term sustainable operation
RIO Railway Infrastructure Optimisation
ERTMS Trackside deployment along the Copenhagen H–Køge Nord–Ringsted section in East Denmark
Construction of railway infrastructure in the Rododafni-Psathopirgos section of the new Athens-Patras railway line
Murcia LAA
Aveiro-Salamanca-Medina del Campo railway connection: Works on energy facilities and services to follow-up works
Implementation of UIC gauge (phase 1) on the Valencia-Tarragona-Barcelona section of the Mediterranean Corridor
New Southern Rail and Road Access to the Port of Barcelona - Phase 2 - Connection Works
Development of Rail Freight Corridor Atlantic "Sines-Lisboa/Leixões-Madrid-Medina del Campo/ Bilbao/San Sebastian-Irun-Bordeaux-Paris/Le Havre/Metz-Strasbourg /Mannheim/Sines-Elvas/Algeciras"
Support to ERTMS implementation
Studies and activities regarding the enhancement of Baltic-Adriatic Rail Freight Corridor
New high capacity railway line: Central Trans-Pyrenees crossing. Studies (Phase 2)
Development of a 1,435 mm standard gauge railway line in the Rail Baltica corridor through Estonia, Latvia and Lithuania
Creation of permanent counterflow installations on the Gazinet-Dax section to increase capacity
Rail2Bordeaux
ARMIS
Modernisation of the Serqueux-Gisors railway line
ETCS Deployment on the French part of the Antwerp-Basel route
Preparation for construction of a second track, upgrade and modernisation of the Škrljevo-Rijeka-Jurdani railway section
Design and study for the modernisation of the Békéscsaba–Lőkösháza (country border) railway section
Upgrading the Kelenföld-Pusztaszabolcs railway line, Stage I (Upgrading the Kelenföld-Százhalombatta section and installation of ETCS level 2)
ERTMS Deployment on the Italian part of the Rhine-Alpine Core Network Corridor
Upgrade and Strengthening of Rail Freight Corridor 6 - Mediterranean Corridor including extension to Croatia
MXP-AT Railink
Enhancing the efficiency of the new container terminal of Interporto di Padova
Brussel-Luxembourg-Strasbourg section of the "EuroCap-Rail" - Luxembourg rail network, works for the construction of a new section providing a direct link between Luxembourg Station and Bettembourg Station
Retrofitting locomotives with ETCS baseline 3
Preparatory study for the deployment of ERTMS on the Kijfhoek (Port of Rotterdam)–Roosendaal–Belgian border railway line section
Works on the E75 railway line (Sadowne-Czyżew section) along with the remaining works on the Warsawa Rembertów-Sadowne section
Studies for the Aveiro-Vilar Formoso rail section
Rehabilitation of the Brasov–Simeria railway line, upgrade for a maximum speed of 160 kph
MidNordic Corridor – Electrification and reconstruction of a Cross Border Link
Bottleneck rehabilitation in the area of Bivje on the Divača–Koper railway line
Technical Equipment and Infrastructure Upgrade: Londonderry to Coleraine Rail Line
Birmingham International Station integrated TEN-T transport hub
Deployment of ETCS Bsl3 L2 on 106 AM Break motor units - Retrofit action to promote safety and cross border transport
Modernisation of the Kostenets–Septemvri railway section
Implementation of TAF TSI at private railway undertakings
Deployment of ERTMS/ETCS on-board components compliant with ETCS Baseline 3 in ČD CARGO, a.s. vehicles on the Rail Freight/Core Network Corridors
Deployment of ERTMS/ETCS on-board components compliant with Baseline 3 in České dráhy a.s. vehicles
ETCS Beroun-Plzeň-Cheb
Paskov Multimodal Container Terminal
Intermodal Terminal Melnik, Phases 2 and 3
Upgrade and retrofitting of on-board ERTMS in Renfe's vehicles
Sines/Lisboa-Madrid high speed rail line - Madrid urban node. Studies for an improved and intermodal adaptation of Chamartín station and high speed access to Madrid airport
Studies and works for connections by rail of 4 existing freight terminals along the Mediterranean Corridor in Spain
RAISE-IT
Project to install ERTMS Baseline 3 on the Regional trains linking France and Luxembourg
Studies for the implementation of the Toulouse Aerospace Express project
Upgrade of the existing track and construction of a second one on the Križevci-Koprivnica-state border railway line section
Upgrade of the Százhalombatta-Pusztaszabolcs railway section, including the installation of ETCS Level 2
Stage 2 deployment of the GSM-R system on the TEN-T Railway Core Network in Hungary
Enhancing Interporto di Padova - Step 2: ancillary measures and ICT solutions for optimising terminal operations, accessibility and interconnections
Vado Multimodal Platform rail/road terminal (core RRT node of the TEN-T network) intermodal connections optimisation and Upgrading (VAMP UP)
ERTMS L2 B3 On-board deployment on NS vehicles
Electrification of railway lines 278 and 274, Węgliniec-Zgorzelec section
Rehabilitation of the Brașov–Sighișoara railway section, Apața–Cața sub-section
Deployment of on-board ERTMS in Sweden
Deployment of ERTMS/ETCS on the Dobova-Zidani Most and Pragersko-Maribor-Sentilj railway lines
Upgrade of the Zidani Most-Celje railway line
Implementation of the technical interoperability for TAF-TSI subsystem at ZSSK CARGO
Modernisation of the Žilina–Košice railway line, Liptovský Mikuláš-Poprad-Tatry (outside) section, stage 1 (Poprad-Lučivná)
Shifting Freight2Rail
Electrification of the Mol-Weert (Belgian part) railway line
Deployment of ETCS Bsl3 L1+L2 on 42 HLE 13 locomotives – retrofit action to promote safety and cross-border transport
Development of the Plovdiv Railway Node
Upgrade and electrification of the Lohsa–Horka (a) route section
HYBRID-INFRA-RAIL
TAF/TAP–TSI implementation in Greece: Design and development of scalable TAF/TAP–TSI systems
FPSII - Advanced deployment of innovative solutions to improve railway traffic management & operation on the Core Network
Demonstration study of infrastructure associated with an innovative LNG traction solution in railway operations
2EUStates2cross
Implementation Study for the optimisation of the cross-border rail infrastructure in the Ghent-Terneuzen port area
Sharing of train tracking & estimated time of arrival information
Implementation of TAF-TSI at the Hungarian private railway undertakings
MiRO
ERTMS on strategic sections of 3 Core Network Corridors
Construction of a pilot docking station, as a part of an LNG distribution system based on cryogenic tank containers
Deployment of ERTMS/ETCS on TEN-T Core Network railway lines

Sustainable Public Transport in the Urban Node Malmö
Deployment of on-board ERTMS in Sweden
Delivery and installation of ETCS into 361 series motive power units for ZSSK
Upgrading and electrification from Vienna Stadlau to the Slovakian Border near Marchegg (bottleneck removal)
Cross-border TAF TSI Telematics investment Action
DB TAF-TSI: Investing in digital communication infrastructure based on telematics application for freight
Implementing the Scan-Med corridor - Upgrading the Danish railway access line to the Fehmarnbelt tunnel (Phase 1)
Core Network - Elimination of Lyon railway bottleneck
Track-side deployment of ERTMS level 2 baseline 3 on the Paris-Lyon HSL
Rail Freight Strengthening Project – Retrofitting of MIR loco E405/E412 with ETCS/ERTMS L2 Baseline 3
ERTMS Baseline 3 upgrade on-board units (OBUs) Rhine-Alpine freight locomotives - II
Deployment of ERTMS On-board in Sweden 2017-2023
VTG Rail Europe status oriented and predictive maintenance
Variable Gauge For Freight Transport
Implementing Telematics Applications for European Interoperability
Building interoperable rail system in the Baltic countries
SaMiR
MiRO
I RAIL
Automated combined transport terminal in Calais enabling the modal shift of all types of semi-trailers from road to rail
Centralising open access intermodal terminal operations for extra-long freight trains in the Kouvola rail-road terminal
Track-side deployment of ERTMS in the Channel Tunnel and interfaces with neighbouring networks
InGE
Veneto Region coordinated initiative enhancing core intermodal nodes
Upgrade and electrification of the Szentgotthárd/Jennersdorf (Hungary / Austria)–Graz railway line
Upgrade and electrification of the Wiener Neustadt-state border-Loipersbach-Schattendorf (-Sopron) railway line
ERTMS prototyping for TRAXX MS2 and TRAXX AC3 locomotives
On-board deployment of ETCS Baseline 3 for Siemens locomotives operating on the TEN-T
ERTMS equipment of Baden-Wuertemberg regional rolling stock
Electrification and signalling works in cross-border Guillarei-Tui section
LARA
TEN-T Upgrade DART+ South West, Engineering Design
On Board ERTMS B3 equipment for the Lombardy Fleet
MXP-NLINE
Prototype for retrofit of Drielandentrein (through-train Liège-Maastricht-Aachen) with ERTMS (B3) on-board equipment
Rotterdam and EU hinterland connection: Theemsweg railway section superstructure
Establishment of a new Comprehensive TEN-T Network cross-border line linking the Katowice and Ostrava regions (Phase I)
Feasibility study and technical design for the modernization of the Coslariu – Cluj-Napoca Railway Line
Battery Cortex
DIS LOGUN
M4H2LM
iTORQUE
DEE-DCR-RE
BAMBOO
SMARTBUS
X-Weaving
LPG for downsized engines
MODBATEV
GALILEO 4 Mobility
FLAGSHIPS
THOR
HEAVEN
H2Haul
H2ME
JIVE
JIVE 2
ZEFER
FCH2RAIL
StaSHH
SAT GAM 2018
FR8RAIL II
FR8RAIL III
FR8RAIL IV
FINE-2
X2RAIL-3
X2RAIL-4
PIVOT2
REG GAM 2018
SPARE
TOD
WINFRAME 4.0
EESTEM
cLEvER
FRC GAM 2018
TRAIL
VOLT
9eGEN
EINSTAIN
PROPCONEL
EDEC
ENG GAM 2018
GAM-2020-ENG
DEFLECT
IMASAT
MIDAS
SYS GAM 2018
NSLGP
SCOPUS
CoCoNut
IMPERIAL
INN-PAEK
FRCDoorDemonstrator
HEPODIS
LightAir
IOVISTAS VIRTEST
NADiA
ELCOCOS
FITCoW
WELTMAP
GAM AIR 2018
GAM-2020-AIR
INTELLICONT
ITEMB
LPA GAM 2018
HLFC 4.0
ShipFC
COSMHYC DEMO
HyShip
CoacHyfied
PJ28 IAO
GRADE
DIGITS-AU
ALBATROSS
PJ38-W3-ADSCENSIO
E-ferry
LeanShips
GreenCharge
MEISTER
HySeas III
HyMethShip
1000kmPLUS
CEVOLVER
SYS2WHEEL
AUTOSHIP
GasOn
ECOCHAMPS
HDGAS
PORTIS
IMPERIUM
HERCULES-2
ORCA
THOMSON
RotorDEMO
ELECTRIC_AXLE
GFF
CIVITAS ECCENTRIC
optiTruck
C-MobILE
ENABLEH2
SELFIE
ICT4CART
AEROFLEX
EVC1000
TELL
ASSURED
STEVE
COLHD
GHOST
LONGRUN
SOLUTIONSplus
SHOW
INCIT-EV
USER-CHI
FASTWATER
SeaTech
eCharge4Drivers
FLAMINGo
LEONARDO
REFLECTIVE
MARBEL
ALBATROSS
ALMA
HELIOS
Current Direct
URBANIZED
PHOENICE

11. ANNEX 3 – STAKEHOLDERS IDENTIFIED

11.1. SUPPLY

The list below corresponds to all the entities that have been considered under the supply category. The total number of entities is 945.

"La Sapienza" University of Rome - POMOS (Pole for Sustainable Mobility) Dept.
2ELECTRON
3DBATTERY LTD
3LRobotics
AAQIUS & AAQIUS SA
AARHUS UNIVERSITET
ABB
Acc Mobility
ADATICA ENGINEERING SL
ADD Technologies
ADDIONICS LTD
ADDVOLT SA
ADN CONTEXT - AWARE MOBILE SOLUTIONS SL
ADVANCED INNOVATIVE ENGINEERING (UK) LIMITED
AELER TECHNOLOGIES SA
AERO CONSULTANTS AG
AERO-MAGNESIUM LIMITED (A.C.S)
AEROMECHS SRL
AeroMobil
AGA AB (LINDE GROUP)
AGILE POWER SWITCH 3D INTEGRATION
AIMSUN SL
AIR LIQUIDE SA
AIRSEAS SAS
AIRTEL ATN LIMITED
AIT AUSTRIAN INSTITUTE OF TECHNOLOGY GMBH
AKUO ENERGY SAS
ALCATEL LUCENT (NOKIA)
ALGRET INNOVATIONS LTD
ALKE SRL
ALLEGO BV
ALTRAN
ALTROCONSUMO EDIZIONI SRL
ALTYS TECHNOLOGIES
AMMINEX EMISSIONS TECHNOLOGY AS (FAURECIA)
ANEMOI MARINE TECHNOLOGIES LTD
ANSYS UK LIMITED
ANT Maschinen GmbH
APPLIED NANO SURFACES SWEDEN AB
AQUASONIC SL
ARISTOTELIO PANEPISTIMIO THESSALONIKIS
ARISTOTELIO PANEPISTIMIO THESSALONIKIS - COMPUTER ENGINEERING DEPT.
ARKEMA FRANCE SA
ARTIN SPOL. S.R.O.
ARTUS SAS (MEGGITT)
ASCENDANCE Flight Technologies
ASE SPA
ASKOLL EVA SPA
ASOCIACION CENTRO TECNOLOGICO CEIT
ATAWEY
ATLANTIS IT SL
ATOM
ATOS
Auto Drive Solutions
AUTOAID GMBH
AUTOKAB SAS
AUTOROUTES TRAFIC
AUVE TECH OUE
AVESTA BATTERY & ENERGY ENGINEERING
AVIA INGENIERIA Y DISEGNO
AVILOO GMBH
AVL SOFTWARE AND FUNCTIONS GMBH
AVMAP
AVT STOYE GMBH
AVY BV
Awake.AI
AXEGAZ SA
AZD PRAHA SRO
BAE SYSTEMS (OPERATIONS) LIMITED
Ballard Power Systems Europe A/S
BASF SE
BE CHARGE S.R.L.
BECKER MARINE SYSTEMS GMBH
BE-MOBILE NV
BENEVELLI SRL
BESTMILE SA
BIA POWER
BigMile
BILLY BIKE
BIOWAY S.R.O.
BLACKSTONE TECHNOLOGY GMBH
Blinkee.city
BLU ELECTONIC SRL
BLUE GRID GAS & POWER S.A. OF ENERGY
BLUEBUS (BLUE SOLUTIONS, BOLLORE GROUP)
BLUEDOT
BLUEWAYS INTERNATIONAL BVBA
BLYSTAD ENERGY MANAGEMENT AS
BOC LIMITED (LINDE GROUP)
BOUND4BLUE SL
BP CHARGEMASTER
Breda University of Applied Sciences
BRIGHTLOOP SAS
BringAuto
BRNO UNIVERSITY OF TECHNOLOGY
BROADBIT BATTERIES OY
BRUSA ELEKTRONIK AG
BULTACO MOTORS SL
BUNKERNET LTD
BUSINOVA
BUSUP TECHNOLOGIES SL
BUTAN PLIN CROATIA
C.I.R.A. CENTRO ITALIANO RICERCHE AEROSPAZIALI SCPA
C2C-NewCap
CaCharge
CAETANO AERONAUTIC SA
CALBATT SRL
CAPTAIN AI
CARGOBEAMER AG
CARGONEXX
CARGOTEC OY
Carplane® GmbH
CEA - Commissariat à l'Energie Atomique et aux Energies Alternatives
CEGELEC SA (ACTEMIUM)
CEIIA
CELCIBUS
CELLINT TRAFFIC SOLUTIONS LTD
CENEX - CENTRE OF EXCELLENCE FOR LOW CARBON AND FUEL CELL TECHNOLOGIES
CENTRO NACIONAL DEL HIDROGENO
CENTRUM DOPRAVNIHO VYZKUMU v.v.i.
CEPSA
CEREUS TECHNOLOGY
CERTH-HIT
CETIL DISPENSING TECHNOLOGY S.L.
CETMA - CENTRO DI RICERCHE EUROPEO DI TECNOLOGIE DESIGN E MATERIALI
CEZ A.S.
CHALMERS UNIVERSITY OF TECHNOLOGY
CHAPS SPOL SRO
ChargePoint
CI COMPOSITE IMPULSE GMBH & CO
Ciclogreen Move and Win S.L.
CIMARRON COMPOSITES LLC
CIMNE
Circ
CIRCLE SPA
CIRCOMP GMBH
CIRCONTROL SA
CITYWAY
CIXI
CleanCar.io
CLEANTRON CLEANTECH BATTERIES
CLEM'
CLEVER A/S
CLMS (UK) LIMITED
CLUE TECHNOLOGIES SL
COLLECTE LOCALISATION SATELITTES (CLS GROUP)
Composite Research srl
COMPOSITES ARAGON SL
COMPOXI S.L.
CONNECTED KERB
CONOSHIP INTERNATIONAL BV
CONTINENTAL AUTOMOTIVE GMBH
CORIMA TECHNOLOGIES
CORIOLIS COMPOSITES
CORTUS ENERGY AB
COSMOTE MOBILE TELECOMMUNICATIONS S.A.
COVENTRY UNIVERSITY
COVESS NV
CRANFIELD UNIVERSITY
CRI EHF
CRYONORM SYSTEMS BV
CRYOSHELTER GMBH
CTAG
CTLUP SRL
D2M-ENERGYTRANSIT
D3 Technologies AG
DAEDALEAN AG
Dancer Bus
DANFOSS EDITRON OY
DANMARKS TEKNISKE UNIVERSITET
DAPHNE TECHNOLOGY SA
DARETECH
DATABEACON SL
DAZETECHNOLOGY SRL
DB ENERGIE GMBH
DBA LAB SPA
DBH LOGISTICS IT AG
DecisionBrain
DELORO WEAR SOLUTIONS GMBH
DENISSON ENERGY S.R.L
DEPA SA
DEUTSCHE TELEKOM AG
DEUTSCHES ZENTRUM FUR LUFT - UND RAUMFAHRT EV
DIGITAL SYSTEM INTEGRATOR SRL
DINITECH GMBH
DOLPROP INDUSTRIES AB
DRIVE SYSTEMS NV
DRONAMICS
DRONE-FUTURE BVBA
DUBLIN CITY UNIVERSITY
DUCKT

DUCKTRAIN
DUFOUR AEROSPACE
DYNAMIC E FLOW
DYNNIQ NEDERLAND BV
E.GO MOOVE GMBH
E.ON
EASE-LINK GMBH
EASYMILE SAS
EATON ELEKTROTECHNIKA SRO
Eccocar Sharing S.L.
ECHANDIA MARINE SWEDEN AB
eCloud Company
ECO EOLIC TOP SYSTEM SL
ECOLE POLYTECHNIQUE FEDERALE DE LAUSANNE
ECOVOLVE
EDF - ELECTRICITE DE FRANCE
EDISON SPA
EDP ENERGIA
EEBC - EUROPEAN ELECTRICAL BUS CO GMBH
EESTI ENERGIA AS
EFESTO
EH GROUP ENGINEERING SA
EIDGENOESSISCHE TECHNISCHE HOCHSCHULE ZUERICH
EIFER EUROPAISCHES INSTITUT FUR ENERGIEFORSCHUNG EDF KIT EWIV
EIFHYTEC
EINRIDE
ELAPHE POGONSKE TEHNOLOGIJE DOO
ELECTREON
ELECTROCHAEA GMBH
ELECTROMAPS SL
Electronic Solutions (ELSOL)
ELEKTRO LJUBLJANA D.D.
ELES DOO SISTEMSKI OPERATER PRENOSNEGA
ELEKTROENERGETSKEGA OMREZJA
ELOGEN
ELONROAD AB
ELRINGKLINGER GROUP
ELWAYS AB
EMINING AG
EMPA - EIDGENOSSISCHE MATERIALPRUFUNGS- UND FORSCHUNGSANSTALT
Encolnvest International SL - ECO-CARS
ENDESA ENERGIA SA
ENEDIS SA
ENEL GROUP
ENERGETSKI INSTITUT HRVOJE POZAR
ENERTIME SA
ENEXIS NETBEHEER BV
ENGIE
ENGIE INEO
ENGIE LABORELEC
ENI SPA
ENIDE SOLUTIONS SL
ENOS D.D.
ENVIAM
ENVIRONMENTAL PROTECTION ENGINEERING SA
EOLY
EP TENDER
EPROINN SRL
EQUINOR ENERGY AS
ERICSSON AB
ERNEO
ERTMS SOLUTIONS SPRL
ESI ITI GMBH
ESMART SYSTEMS AS
ESSENCE Motocycles
ETREL SVETOVANJE IN DRUGE STORITVE DOO
E-TRUCKS EUROPE BVBA
EURECOM
EUROPEAN SUSTAINABLE PROPULSION
EUROTECH SP ZOO
EVA (Electric Visionary Aircraft)
E-VAI SRL
EVARM INNOVATION SL
EVBOX BV
EVE SYSTEM SAS
EVERFUEL EUROPE A/S
EVERYSENS
EVOLO
EVOY AS
FACHHOCHSCHULE NORDWESTSCHWEIZ
FAIVELEY TRANSPORT ITALIA SPA (WABTEC)
FCP FUEL CELL POWERTRAIN GMBH
FELYX
Fenris Motorcycles
FERROAMP
FIER Automotive BV
FLUIDTIME DATA SERVICES GMBH
FLYZEN
FONDAZIONE BRUNO KESSLER
FONDAZIONE LINKS
FORDONSGAS SVERIGE AB
FORESHIP OY
FORTUM OYJ
FORTUM SVERIGE AB
FRAUNHOFER VERKEHR
FRAUNHOFER-CML
FRAUNHOFER-IISB
FRAUNHOFER-IMM
FRAUNHOFER-ISE
FRAUNHOFER-ISI
FRAUNHOFER-ITWM
FRAUNHOFER-IVI
FRAUNHOFER-LBF
FREEWAY SAS
FREQUENTIS AG
FREUDENBERG FST GMBH
FRIEDRICH-ALEXANDER-UNIVERSITAET ERLANGEN-NUERNBERG
FUELSAVE GMBH
FUNDACIO EURECAT
Fundacio Privada i2Cat
FUNDACION AITIIP
FUNDACION ANDALUZA PARA EL DESARROLLO AEROESPACIAL
FUNDACION CENTRO DE TECNOLOGIAS AERONAUTICAS
FUNDACION CIDAUT
FUNDACION CIDETEC
FUNDACION CIRCE CENTRO DE INVESTIGACION DE RECURSOS Y CONSUMOS ENERGETICOS
FUNDACION PARA LA INVESTIGACION, DESARROLLO Y APLICACION DE MATERIALES COMPUESTOS (FIDAMC)
FUNDACION TECNALIA RESEARCH & INNOVATION
FUNDACION VALENCIAPORT
FUNKWERK SYSTEMS GMBH
FURUNO FINLAND OY
FUTURE PROOF SHIPPING BV
FZI FORSCHUNGSZENTRUM INFORMATIK
G.M.S. GLOBAL MARITIME SERVICES LIMITED
G4S TELEMATIX S.A.
GALILEO SATELLITE NAVIGATION (GSN) LTD
GALP GAS NATURAL SA
GARRETT MOTION
GASPOL SA
GASUM OY
GAZELLE TECH
Gdansk University of Technology
GDYNIA Maritime University
GECCO
GERTEK SOCIEDAD DE GESTIONES Y SERVICIOS SA
GERTRUDE SAEM
GESTION INTELIGENTE DE CARGAS SA
GEVAS SOFTWARE GMBH
GEYSER BATTERIES OY
GIVENTIS INTERNATIONAL BV
GLEAM TECHNOLOGIES GMBH
GMVIS SKYSOFT SA
GOOPTI INTELIGENTNE TRANSPORTNE RESITVE DOO
GORDIAN
Green Communications SAS
GREENFLUX ASSETS BV
Greensight
GREENSPIDER GMBH
GRUPA LOTOS SA
GRUPO DISA
GRUPO ETRA
GTD SISTEMA DE INFORMACION SAU
GULPLUG
H2 ENERGY AG
H2 MOBILITY GMBH
H2FLY GMBH
H2P SYSTEMS
HACON INGENIEURGESELLSCHAFT MBH
HAILO TECHNOLOGIES LTD
HALMSTAD UNIVERSITY
Hardt Hyperloop
HEART AEROSPACE AB
HEDNO SA
Heilbronn University of Applied Sciences
HEINZMANN GMBH & CO KG
HELBIO S.A.
HELIOX BV
HELMHOLTZ-ZENTRUM GEESTHACHT
HEP D.D.
HERA SPA
HERE GLOBAL BV
HEUSCH BOESEFELDT GMBH
HEXAGON
HeyCharge GmbH
HITACHI EUROPE LIMITED
HITACHI RAIL STS SPA
HIWITRONICS VERIEN ZUR UNTERSUCHUNG VON HI-FIDELITY WIRELESS ELEKTRONIK-LOSUNGEN
HOCHSCHULE FUR TECHNIK UND WIRTSCHAFT DES SAARLANDES
HOLLAND CONTAINER INNOVATIONS NEDERLAND B.V.
HONEYWELL AEROSPACE
Hrvatski Telekom d. d.
HTREN FUEL SYSTEMS AS
HUBJECT GMBH
HUBUP
HUG ENGINEERING AG
Huvr Trek Group SL
HUYGENS ENGINEERS BV
HYBRID AIR VEHICLES LIMITED
HYDROGENICS EUROPE
HYDROGENIOUS TECHNOLOGIES GMBH
HYDRUS ENGINEERING LIMITED
HYGEAR BV
HYGEN
HYSILABS
HYTCHERS
I SEE MOBILITY GMBH
I.M.A.S.T. - DISTRETTO SULL'INGEGNERIA DEI MATERIALI POLIMERICI E COMPOSITI E STRUTTURE SCARL
IBERDROLA SAU
IBIL SA
IBK-INNOVATION GMBH & CO. KG
IBM IRELAND LIMITED
ICELANDIC NEW ENERGY LTD
ICPE
I-DE REDES ELECTRICAS INTELIGENTESSA
IDEAS & MOTION SRL
IDIADA AUTOMOTIVE TECHNOLOGY SA
IDNEO TECHNOLOGIES SAU
IEED VEDECOM
IESTA - INSTITUT FUR INNOVATIVE ENERGIE - STOFFAUSTAUSCHSYSTEME
IFP Energies nouvelles

IFSTTAR
IKEM - INSTITUT FUR KLIMASCHUTZ ENERGIE UND MOBILITAT-RECHT, OKONOMIE UND POLITIK EV
IKERLAN S. COOP
ILS- Institut für Landes und Stadtentwicklungsforschung gGmbH
IM Efficiency
IMEC
IMECAR ELEKTRONIK
INCAS - National Institute for Aerospace Research "Elie Carafoli"
INDRA SISTEMAS SA
INEGI - INSTITUTO DE CIENCIA E INOVACAO EM ENGENHARIA MECANICA E ENGENHARIA INDUSTRIAL
INERATEC GMBH
INFORMATION TECHNOLOGY FOR MARKET LEADERSHIP
InfoTripla Oy
INGENIEURGESELLSCHAFT FUER AUTO UND VERKEHR GMBH
INIT GROUP
INLECOM INNOVATION
INNOGY SE (E.ON.)
INO8
InstaFreight
INSTITUT MINES-TELECOM
Institute for Innovative Technologies Ltd
INSTITUTE METRON
INSTITUTE OF COMMUNICATION AND COMPUTER SYSTEMS
INTELLIGENT ENERGY LIMITED
INTENS CORPORATION SRO
INTERACTIVE FULLY ELECTRICAL VEHICLES SRL
INTRACOM S.A. TELECOM SOLUTIONS
INVENT GMBH
IO-DYNAMICS GMBH
IONITY GMBH
IPT TECHNOLOGY GMBH
IREC - FUNDACIO INSTITUT DE RECERCA DE L'ENERGIA DE CATALUNYA
IREN SPA
IRIZAR E-MOBILITY SL
IRT ANTOINE DE SAINT EXUPERY
ISTANBUL OKAN UNIVERSITESI
ISTITUTO INTERNAZIONALE DELLE COMUNICAZIONI (IIC)
ITACA SRL
ITALIANA PETROLI SPA (GRUPPO API)
ITM POWER PLC
ITO WORLD LTD.
IT'S'UNLIMITED SYSTEMS ENGINEERING BV TRADING AS NGENI
IZIVIA (GROUPE EDF)
JEMA ENERGY SA
JOHNSON MATTHEY PLC
Joulz Diensten B.V.
Journify
JSC VEJO PROJEKTAI
KAPSCH
KARDINAL
KAROS
KELAG KARNTNER ELEKTRIZITATS AKTIENGESELLSCHAFT
KENTKART EGE ELEKTRONIK AS
KEYOU GMBH
KIDO DYNAMICS
KIUNSYS (MUNICIPIA - GRUPPO ENGINEERING)
KNORR-BREMSE SYSTEME FUR SCHIENENFAHRZEUGE GMBH
KOLBERG CASPARY LAUTOM AS
KONETIK
KONGSBERG DIGITAL AS
KONGSBERG MARITIME AS
Koninklijke KPN NV
KONTRON TRANSPORTATION AUSTRIA AG
KRAFTHEM
K-RYOLE
KU LEUVEN
Kurt.energy
KUWAIT PETROLEUM ITALIA SPA
LADAR LIMITED
LANDI RENZO SPA
Laplandar
Last Mile Team
LEC GMBH
LECLANCHE SA
LEONARDO SPA
LEROUX ET LOTZ TECHNOLOGIES
LIEBHERR AEROSPACE
LIEBHERR SA
LIEWENTHAL ELECTRONICS LTD
LIGHTYEAR ONE
LILIUM AVIATION
LINDE GMBH
LINDHOLMEN SCIENCE PARK AKTIEBOLAG
Link Campus University
LINKOPINGS UNIVERSITET
LIQUIND GMBH
LIVEDRIVE
LKR LEICHTMETALL KOMPETENZZENTRUM RANSHOFEN GMBH
LMAD - LAST MILE AUTONOMOUS DELIVERY
LOGIT ONE NV
LORTEK S COOP
LOTOS PALIWA SP Z.O.O.
LUKASIEWICZ INSTITUTE OF AVIATION
LUNDS UNIVERSITET
Luxembourg Institute of Science and Technology (LIST)
LUXOFT ITALY SRL
MACQ SA
MAGMENT GmbH
MAGNETIC SYSTEMS TECHNOLOGY LIMITED (MAGTEC)
MAGNUSS
MAHYTEC SARL
MAP TM
MARIN - STICHTING MARITIEM RESEARCH INSTITUUT NEDERLAND
MARINE ENGINEERING SRL
Marine Performance Systems BV
MARINE SERVICE GMBH
MARLO AS
MARSEILLE GYPTIS INTERNATIONAL
MASH Energy ApS
MATERIALS CENTER LEOBEN FORSCHUNG GMBH
Mavel Powertrain
MAX PLANCK INSTITUT FUR EISENFORSCHUNG GMBH
MAZARO NV
MBN NANOMATERIALIA SPA
MCPHY ENERGY
MECAPROM
MEGGITT AEROSPACE LIMITED
MET3R
METHANEX EUROPE SA
MILESWAP
MILEUS
MILLOR ENERGY SOLUTIONS SL
Mob-Energy
MOBI.E SA
MOBIAG
Mobimeo
Mobistreet
MOIA
MOLGAS ENERGIA SAU
Moovster
MOSAIC FACTOR SL
MOTEG GMBH
MOTIT WORLD SL
MOVISTAR SA
MULTITEL INNOVATION CENTRE
MYFC AB
NANOLIKE SAS
NANOSUN LIMITED
NATURGY ENERGY GROUP SA
NAVIGATO
NAVLANDIS SL
NAVYA
NAWATechnologies
Neander Shark GmbH
NEDGIA MADRID S.A. (GRUPO NATURGY)
NEDSTACK FUEL CELL TECHNOLOGY BV
NEEL SP. ZOO
NEL HYDROGEN AS
NEOGLS
NEOPTERA LTD
NERVE SMART SYSTEMS APS
NESTE OYJ
Nevomo
NEXEYA FRANCE
NEXT Electric Motors
NEXTANT APPLICATIONS & INNOVATIVE SOLUTION SRL (NAIS)
NEXXTLAB SA
NHP SRL
NIMBER AS
NLR - STICHTING NATIONAAL LUCHT-EN RUIMTEVAARTLABORATORIUM
NOESIS SOLUTIONS NV
NOKIA SOLUTIONS & NETWORKS
NOMMON SOLUTIONS AND TECHNOLOGIES SL
NORDCOM SPA
NORDSOL
NORDSYS GMBH
NORSEPOWER OY LTD
NOVOTECH AEROSPACE ADVANCED TECHNOLOGY SRL
NPROXX BV
NTUA - NATIONAL TECHNICAL UNIVERSITY OF ATHENS
NUWIEL GMBH
NXP SEMICONDUCTORS NETHERLANDS B.V.
O.M.T. - OFFICINE MECCANICHE TORINO SPA
O2 CZECH REPUBLIC
OECON PRODUCTS & SERVICES GMBH
OFFICE NATIONAL D'ETUDES ET DE RECHERCHES AEROSPATIALES
OFFSHORE NAVIGATION LTD
OLTIS GROUP A.S.
OMV GROUP
ON ELECTRIC SHARING MOBILITY
ONOMOTION GMBH
OnTruck
OPEN TECHNOLOGY SERVICES AE
OPUS REMOTE SENSING EUROPE SL
Öresundskraft AB
ORIBIKY
OTC ENGINEERING SOCIEDAD LIMITADA
OTIV
OXEON AB
OY LANGH TECH AB
OY TURKU ENERGIA - ABO ENERGI AB
Oy Woikoski Ab
P.G.A. ELECTRONIC
PANSA - POLSKA AGENCJA ZEGLUGI POWIETRZNEJ
PARABOL
ParkingMap
PAROX ENERGY OU
PASSION MOTORBIKE FACTORY SL
PATENTEC AS
Pavnext
PAZTIR B.V.
PENSO LTD
PERS-EE
PETROL GROUP
PETROLEOS DE PORTUGAL - PETROGAL S.A.
PEX
PHOENIX ISI
PILDO LABS WESSEX LTD
PIONIRA NV
PITPOINT CLEAN FUELS

PJ MESSTECHNIK GMBH
PLACE TO PLUG
PLANET PLANUNGSGRUPPE ENERGIE UND TECHNIK GBR
PLUSERVICE SRL
POLITECNICO DI MILANO
POLITECNICO DI MILANO - DAER
POLITECNICO DI TORINO
POLITECNICO DI TORINO - DIMEAS
POLITECNICO DI TORINO - E3 GROUP
POLYCOM PREDELAVA PLASTICNIH MAS INORODJARSTVO SKOFJA LOKA DOO
POWER SYSTEM TECHNOLOGY
PowerCell Sweden AB
POWERDALE NV/SA
POWERTECH SYSTEMS
Poznan University of Technology
PRAGMA INDUSTRIES FUEL CELLS
PRIMARINE GMBH (ERC GROUP)
Prins Autogassystemen B.V.
PRISMA ELECTRONICS SA
Privé S.r.l.
PROBUNKERS
PRODEVELOP SL
PROMATECH MARITIME TECHNOLOGIES
PROTASIS SA
PROTOM GROUP SPA
Proton Motor Fuel Cell GmbH
PROTOTECH AS
PTV AG
QARIN BV
QOOLERS S.R.O.
QUMAK SA
QWELLO
R3 - RELIABLE REALTIME RADIO COMMUNICATIONS GMBH
R53 ENGINEERING
RADISURF APS
RDIUP
REBELROAM OU
RED ELECTRICA DE ESPANA S.A.U.
RenCat Aps
Renovatio Asset Management SRL
REPSOL SA
RESCOLL
RHEINENERGIE AG
RHEINISCH-WESTFAELISCHE TECHNISCHE HOCHSCHULE AACHEN
RHOE URBAN TECHNOLOGIES
RISE RESEARCH INSTITUTES OF SWEDEN AB
ROAD CLOUD OY
ROBERT BOSCH GMBH
ROLANDE BV
ROOL'IN
ROUTE220 SRL
RUPTELA UAB
RYSE HYDROGEN LIMITED
SAAB TRASPONDERTECH AB
SAFE GREEN LOGISTICS A/S
SAFRAN AEROTECHNICS
SAFRAN ELECTRICAL & POWER
SAFRAN SA
SAFT
SammeVei
SAMSUNG SDI BATTERY SYSTEMS GMBH
SCANDINAOS AB
SCANDINAVIAN AVIONICS GREECE SA
SCHOLT ENERGY CONTROL BV
SCOOBIC
SeaBee
SEABILITY LTD
SEABUBBLES
SEAFLEX AB
SELT AEROSPACE & DEFENCE
SEM SIGEIF MOBILITES
SEM SRL - SMART ECO MOVING
SENSEFIELDS SL
SENSIBLE 4 OY
SERVO MOVEMENT KFT
SHELL
SHIFT Aviation Solutions Ireland
SHOTL
SIA DIGAS
SIEMENS AG
SIEMENS INDUSTRY SOFTWARE
SIEMENS MOBILITY GMBH
SILENCE URBAN ECOMOBILITY
SILEX INDUSTRIAL AUTOMATION PLC
SIMACAN BV
SINTEF AS
SIQENS GMBH
SIRRIS
SiTI - Higher Institute on Territorial Systems for Innovation
SKELETON TECHNOLOGIES
SKYLIFE ENGINEERING SL
Skymantics Europe
SKYPULL SA
SLOT CONSULTING LTD
SMART AIRPORT SYSTEMS
Smart Cylinders
SMATRICS GMBH & CO KG
SOFICO
SOFLEET (SYNOX)
SOFTECO SISMAT S.R.L. (ALGOWATT)
SOFTWARE AG
SOFTWHEEL LTD
SoHHytec
SOLBIAN ENERGIE ALTERNATIVE SRL
SOLMOVE GMBH
SOLTEL IT SOLUTIONS
SOLUM
Solution F
Sono Motors
SOPHIA HIGH TECH SRL
SPEAR POWER SYSTEMS BV
SPIE SUD-EAST
SPP A.S.
SSPA SWEDEN AB
Stadtwerke Bruneck – Azienda Pubbliservizi Brunico
STADTWERKE NORDERNEY GMBH
STAM SRL
STATENS VAG- OCH TRANSPORTFORSKNINGSINSTITUT
STATIONS-E
STATKRAFT HYDROGEN SWEDEN AB
STEMMANN-TECHNIK GMBH
STENA RECYCLING AB
STORENGY
STRATIO AUTOMOTIVE
STREAMDATA.IO (AXWAY)
SUBLIME Energie
SUMY
SUNSWAP
SUPER RADIO AS
SURFACE EFFECT SHIPS EUROPE AS (SES-X)
SURVE MOBILITY GMBH
SUSTAINABLE ENERGY AS
SWARCO
SWESTEP AB
SWOBBEE GMBH
SWUGO
SYCUBE INFORMATIONSTECHNOLOGIE GMBH
SYMBIO
SYSADVANCE SISTEMAS DE ENGENHERIA S.A.
TANKTWO OY
TASS INTERNATIONAL MOBILITY CENTER B.V. (SIEMENS)
TECHNI-MODUL ENGINEERING
TECHNISCHE UNIVERSITAET GRAZ
TECHNISCHE UNIVERSITAET ILMENAU
TECHNISCHE UNIVERSITAET WIEN
TECHNISCHE UNIVERSITAT BERLIN
TECHNISCHE UNIVERSITEIT DELFT
TECHNIUM AS (reTyre)
TECHNO SYSTEM DEVELOPMENT SRL
TECHNOLUTION BV
TEKNO COMPOSITI SRL
TEKNOLOGIAN TUTKIMUSKESKUS VTT OY
TEKNOLOGISK INSTITUT
TELEFONICA SA
TELENAVIS S.A.
Teleport Mobility
TEMAI INGENIEROS SL
TERRAIN TECHNOLOGIES SL
TEVVA MOTORS LIMITED
THALES GROUP
THYSSENKRUPP CARBON COMPONENTS
TIER Mobility
TITAN LNG BV
T-MOBILE AUSTRIA GMBH
T-MOBILE CZECH REPUBLIC
TNO
TOMTOM
TOTAL SA
TRACKS
TRACTABEL-ENGIE SA
TRAFFIC TECHNIQUE SA
Transilvania University of Brasov
TRANSMETRICS AD
TRANSPOLIS
TRANSPORT & MOBILITY LEUVEN NV
TRANSPORT SYSTEMS CATAPULT
TRESOIL BIOFUELS SRL
TRILOBES BV
T-SYSTEMS INTERNATIONAL GMBH
TTTECH GROUP
TU EINDHOVEN
Tuireann Energy Ltd.
TURNN
TWI LIMITED
UBIGO INNOVATION AB
ULTIMATE CELL LDA
UMICORE
Uneed.IT
Universidad Autonoma de Madrid
Universidad Cardenal Herrera
Universidad Carlos III de Madrid
Universidad Complutense de Madrid
Universidad de Alcalà
Universidad de Almeria
Universidad de Burgos
Universidad de Cadiz
Universidad de Cantabria
Universidad de Cordoba
Universidad de Extremadura
Universidad de Granada
Universidad de Jaën
Universidad de la Laguna
Universidad de la Rioja
Universidad de Las Palmas de Gran Canaria
Universidad de Leon
Universidad de Malaga
Universidad de Murcia
Universidad de Navarra
Universidad de Salamanca
Universidad de Valladolid
Universidad de Vigo
Universidad del País Vasco / Euskal Herriko Unibertsitatea
Universidad Europea
Universidad Francisco de Vitoria
Universidad Miguel Hernandez
UNIVERSIDAD POLITECNICA DE MADRID
UNIVERSIDAD POLITECNICA DE MADRID - INSIA DEPT.
Universidad Rey Juan Carlos
Universidad San Pablo CEU
UNIVERSIDADE DE COIMBRA
Universidade de Coruna
Università degli Studi della Basilicata
Università degli Studi della Campania “Luigi Vanvitelli”
Università degli Studi dell'Insubria
Università degli Studi di Brescia
Università degli Studi di Cassino e del Lazio Meridionale
Università degli Studi di Catania
UNIVERSITA DEGLI STUDI DI FIRENZE

UNIVERSITA DEGLI STUDI DI FIRENZE - DIE DEPT.
Università degli Studi di Milano-Bicocca
UNIVERSITA DEGLI STUDI DI NAPOLI FEDERICO II
Università degli Studi di Perugia
Università degli Studi di Torino
UNIVERSITA DEGLI STUDI GENOVA - DITEN
Università degli Studi ROMA TRE
Università di Bologna
Università di Camerino
Università di Parma
Università di Pavia
UNIVERSITA DI PISA
Università LUISS Guido Carli
UNIVERSITAET STUTTGART
UNIVERSITAET ULM
Universitat Abat Oliba CEU
Universitat de Barcelona
UNIVERSITAT DE GIRONA
UNIVERSITAT DE GIRONA - AMADE
Universitat de Lleida
Universitat de Valencia
Universitat de Valencia - LISITT
Universitat Hamburg
Universität Hildesheim
Universitat Jaume I
UNIVERSITAT POLITECNICA DE CATALUNYA
UNIVERSITAT POLITECNICA DE CATALUNYA - FIB
UNIVERSITAT POLITECNICA DE VALENCIA
UNIVERSITAT POLITECNICA DE VALENCIA - CMT THERMAL ENGINES
Universitat Pompeu Fabra
Universitat Rovira i Virgili
Universitdad San Jorge
UNIVERSITE DES SCIENCES ET TECHNOLOGIES DE LILLE - LILLE I
UNIVERSITEIT GENT
UNIVERSITETET I OSLO
University di Genova
UNIVERSITY OF BATH
University of Gothenburg
University of Hertfordshire
UNIVERSITY OF NOTTINGHAM-IAT
UNIVERSITY OF PATRAS
UNIVERSITY OF SOUTHAMPTON
UNIVERSITY OF STRATHCLYDE
University of Stuttgart
UNIVERSITY OF SURREY
University of Trás-os-Montes e Alto Douro
UNIVERSITY OF TRENTO
University of Worcester
University of Zagreb
Universotà di Siena
Univrsidad de Zaragoza
upBUS
Urban Mobility Systems BV
Urban Sharing
URBEEZ
Utrecht University of Applied Sciences
UZE.energy
VADECITY
VALEO COMFORT AND DRIVING ASSISTANCE
VELCO
VEM SOLUTIONS SPA
VEPLAS GROUP
VERBUND AG
VERKOR
VESPUTI
VESTEL ELEKTRONIK SANAYI VE TICARET ANONIM SIRKETI
VIANOVA
VIASERVICE SA
VICUS DESARROLLOS TECNOLOGICOS SL
VIMASOL E HIJOS SL
VIRTUAL VEHICLE RESEARCH GMBH
VMZ BERLIN BETREIBERGESELLSCHAFT MBH
Voi Technology
VOLOCOPTER GMBH
VOLTERO SAS
Volvero
VRIJE UNIVERSITEIT BRUSSEL
VZLU - CZECH AEROSPACE RESEARCH CENTRE
WAERTSILA GAS SOLUTIONS AS
WARTSILA
WATTO
WE DRIVE SOLAR NL BV
WESTCON POWER AUTOMATION AS
WESTERN SYSTEMS OY
Wind Mobility
WIND TRE SPA
WINSLIM SARL
WORLDSENSING S.L.N.E.
XELECTRIX POWER GMBH
XEROLUTIONS SL
XYZ Dynamics
Yape
YARA INTERNATIONAL ASA
Západoslovenská energetika (ZSE)
ZAPGO LTD
ZEHUS SPA
Zeleros
ZEMISSION AB
ZENTRUM FUR SONNENENERGIE- UND WASSERSTOFF-FORSCHUNG BADEN-WURTTEMBERG
Zéphyr & Borée
ZEPLUG
Zepp.solutions B.V.
ZET GMBH
ZETA AUTOMOTIVE LTD
ZOOV
ZORLU ENERJI ELEKTRIK URETIM AS
ZPARQ AB

11.2. DEMAND

The list below corresponds to all the entities that have been considered under the demand category. The total number of entities is 1023.

A. AGRATI SPA
A/S FEMERN LANDANLÆG
AB TRANSITIO
ABB
ABB TURBO SYSTEMS AG
ABEKING & RASMUSSEN SCHIFFS- UND YACHTWERFT SE
ABERDEEN CITY COUNCIL*
ABERDEEN HARBOUR BOARD
ABERDEENSHIRE COUNCIL
Abertis Autopistas España S.A.
ACB - AIR CARGO BELGIUM
ACGB - ALUMINIUM RESERVOIRS
ACITURRI
ADIF - ADMINISTRADOR DE INFRAESTRUCTURAS FERROVIARIAS
ADIF-ALTA VELOCIDAD
ADRIAFER SRL
AEFP - ASOCIACION DE EMPRESAS FERROVIARIAS PRIVADAS
Aernnova Aerospace S.A.U.
AERO KOMMUNE
AeroMobil
AEROSOFT SPA
AERTEC SOLUTIONS SL
AIR FRANCE SA
AIR LIQUIDE SA
Air Navigation Services of The Czech Republic
AIR TRACTOR, INC.
AIRBUS DEFENCE & SPACE
AIRBUS HELICOPTERS
AIRBUS OPERATIONS
AIRBUS SA
AIRPORT NIKOLA TESLA BELGRADE
AKIRA TECHNOLOGIES SARL
ALEXELA ENERGIA AS
ALKE SRL
ALLIANDER NV
ALLTOURS
ALPHA TRAINS LUXEMBOURG S.A.R.L.
ALSTOM TRANSPORT SA
ALTRA SPA
ALTROCONSUMO
ANGLO BELGIAN CORPORATION
ANTWERP EUROTERMINAL NV
ANTWERP PORT AUTHORITY
APDL – ADMINISTRAÇÃO DOS PORTOS DO DOURO LEIXÕES E VIANA DO CASTELO S.A
APL - Administraçao do Porto de Lisboa SA
APRAM - ADMINISTRAÇÃO DOS PORTOS DA REGIÃO AUTÓNOMA DE MADEIRA SA
APSS - ADMINISTRAÇÃO DOS PORTOS DE SETÚBAL E SESIMBRA S.A.
AREA METROPOLITANA DE BARCELONA
ARGONON SHIPPING B.V. (DEEN SHIPPING)
Arista Shipping S.A.
ARISTOTELIO PANEPISTIMIO THESSALONIKIS
Arnhem Municipality
ARRIVA BUS UK
ARRIVA PERSONENVERVOER NEDERLAND B.V.
ARRIVAL LIMITED
AS TALLINK GRUPP
AS TALLINNA SADAM
ASCO INDUSTRIES N.V.
ASFA - Association des Sociétés Françaises d'Autoroutes
ASKOLL EVA SPA
ASOCIACION AEDIVE
ASOCIACION CLUSTER DE MOVILIDAD Y LOGISTICA DE EUSKADI
ASOCIATIA DE DEZVOLTARE INTERCOMUNITARA ZONA METROPOLITANA CONSTANTA
ASOCIATIA GAZULUI NATURAL PENTRU VEHICULE- NGVA
Associated British Ports
Association des Consommateurs Test-Achats SCRL
ASSOCIATION EUROPEENNE DES FOURNISSEURS AUTOMOBILES
ASSOCIATION EUROPEENNE DES VEHICULES ELECTRIQUES ROUTIERS
ASSTRA – Associazione Trasporti
ASTILLEROS ARMON SA
ASTILLEROS DE SANTANDER SA
ATC FRANCE
ATHENS INTERNATIONAL AIRPORT S.A.
ATHINAIKI METAFORIKI S.A.

Attica Ferries Maritime Company
AUDI AG
AUSTRIATECH - GESELLSCHAFT DES BUNDES FUR TECHNOLOGIEPOLITISCHE MASSNAHMEN GMBH
AUSTRO CONTROL OSTERREICHISCHE GESELLSCHAFT FUR ZIVILLUFTFAHRT MBH
AUTOBAHNEN- UND SCHNELLSTRASSEN-FINANZIERUNGS-AKTIENGESELLSCHAFT
AUTORIDAD PORTUARIA DE BALEARES
AUTORIDAD PORTUARIA DE BARCELONA
AUTORIDAD PORTUARIA DE FERROL-SAN CIBRAO
AUTORIDAD PORTUARIA DE LA BAHIA DE ALGECIRAS
AUTORIDAD PORTUARIA DE VALENCIA
Autorità di Sistema portuale del Mar Ligure Occidentale
Autorità di Sistema Portuale del Mar Tirreno Settentrionale
Autorita' di Sistema Portuale del Mare Adriatico Centrale
Autorità di Sistema Portuale del Mare Adriatico centro-settentrionale
Autorità di Sistema Portuale del Mare Adriatico Orientale
Autorità di Sistema Portuale del Mare Adriatico Settentrionale
AUTORITA PORTUALE DEL MAR LIGURE ORIENTALE
AUTOSTRADA DEL BRENNERO SPA
AVENTICS GMBH
AVIO AERO SPA
AVL LIST GMBH
AYUNTAMENT DE BARCELONA
AYUNTAMIENTO DE BILBAO
AYUNTAMIENTO DE CALVIA
AYUNTAMIENTO DE MADRID
AYUNTAMIENTO DE MALAGA
AYUNTAMIENTO DE MURCIA
AYUNTAMIENTO DE VALENCIA
AYUNTAMIENTO DE ZARAGOZA
AZIENDA VENEZIANA DELLA MOBILITA SPA
BAE SYSTEMS (OPERATIONS) LIMITED
BAETSEN VERHUUR BV
BALEARIA EUROLINEAS MARITIMAS S.A.
BALLERUP KOMMUNE
BANEDANMARK - RAIL NET DENMARK
BARCELONA DE SERVEIS MUNICIPALS SA
Basque Government - Traffic Directorate
BATZ SOCIEDAD COOPERATIVA
Bayernhafen GmbH & Co. KG
BCT - Baltic Container Terminal Sp. z o.o.
BENEVELLI SRL
BENTELER INTERNATIONAL AG
BERNHARD SCHULTE SHIPMANAGEMENT
BETAMOTOR SPA
BIRMINGHAM CITY COUNCIL
BLUE GRID GAS & POWER S.A. OF ENERGY
BLUE LINE LOGISTICS NV
BLUEBUS (BLUE SOLUTIONS, BOLLORE GROUP)
BMK - Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology
BMVI - Bundesministerium für Verkehr und digitale Infrastruktur
BMW GROUP
BOEING
BOLLORE PORTS
BOLUDA CORPORACION MARITIMA S.L.
BOMBARDIER TRANSPORTATION
BORDEAUX METROPOLE
BORGWARNER GMBH
BOZANKAYA OTOMOTIV MAK IMALAT ITH VE IHR ANONIM SIRKETI
BPOST
Breda University of Applied Sciences
Breuckmann eMobility
BRIGHTON & HOVE BUS AND COACH COMPANY LIMITED
BRITISH AIRWAYS PLC
BRITTANY FERRIES
BRUGG ROHR AG
Brussels Capital Region - Brussels Mobility
BUDAPEST AIRPORT ZRT.
BUDAPEST FOVAROS ONKORMANYZATA
BULATSA - BULGARIAN AIR TRAFFIC SERVICES AUTHORITY
Bulgarian Ports Infrastructure Company
Bundesanstalt für Straßenwesen
BURSA BUYUKSEHIR BELEDIYESI
BUSINOVA
CA DE L'AUXERROIS
CAETANOBUS
CAF - Construcciones y Auxiliar de Ferrocarriles, S.A.
Calais Promotion - Association pour le développement Économique du Pays du Calaisis
Calvera Group
CAMARA MUNICIPAL DE LISBOA
CAPITAL-EXECUTIVE SHIP MANAGEMENT CORP
CAPTRAIN ESPAÑA S.A.U
CAPTRAIN ITALIA SRL
CARNIVAL CORPORATION & PLC
CARROSSERIE HESS AG
CD CARGO A.S.
CEREMA
Ceska republika – Ministerstvo dopravy
CESKE DRAHY A.S.
CESKE PRISTAVY A.S.
CFR SA
CFT - COMPAGNIE FLUVIALE DE TRANSPORT (SOGESTRAN GROUP)
Chambre de Commerce et d'Industrie de Caen Normandie
Chambre de Commerce et d'Industrie de Morlaix
CHANTIERS DE L'ATLANTIQUE
ChargePoint
CHEP ESPANA SA
CIFA SPA
Città di Lucca
City of Amsterdam
CITY OF BRATISLAVA
CITY OF BRNO
City of Ghent
City of Graz
CITY OF KOUVOLA
CITY OF LJUBLJANA
CITY OF OSIJEK
City of Stockholm
CITY OF TURKU
CITY OF ZAGREB
CMA CGM S.A.
CMTIR TRANSPORTES NACIONAIS E INTERNACIONAIS S.A.
CNH INDUSTRIAL
COLAS
COLRUYT GROUP
COMBINED CARGO TERMINAL BV
COMMUNAUTE D'AGGLOMERATION DE VERSAILLES GRAND PARC
COMMUNAUTE D'AGGLOMERATION SARREGUEMINES CONFLUENCES
COMMUNAUTE DE COMMUNES TOURAINE VALLEE DE L'INDRE
COMUNE DI FIRENZE
COMUNE DI GENOVA
COMUNE DI MILANO
Comune di Palermo
COMUNE DI TORINO
COMUNE DI TRIESTE
COMUNE DI VENARIA REALE
COMUNE DI VERONA
CONFETRA SERVIZI SRL
CONNEXXION NV
Conseil Régional Auvergne-Rhône-Alpes
Consejería de Fomento e Infraestructuras de la Región de Murcia (Ministry of Public Works and Infrastructure)
CONSORCIO REGIONAL DE TRANSPORTES PUBLICOS REGULARES DE MADRID
CONSORZIO ZAI
CONSTELLIUM UK LIMITED
CONTINENTAL AUTOMOTIVE GMBH
CONTINENTAL RAIL S.A.U.
COOPERATION POUR LE DEVELOPPEMENT ET L'AMELIORATION DU TRANSPORT URBAIN ET PERIURBAIN
CORREOS SA
COSTA CROCIERE SPA
COSTIERO GAS LIVORNO SPA
COSTRUZIONI AERONAUTICHE TECNAM SPA
COUNCIL OF REGION BRITTANY
COUNCIL OF VIGO
CP - COMBOIOS DE PORTUGAL EPE
CPK - CENTRALNY PORT KOMUNIKACYJNY (SOLIDARITY TRANSPORT HUB)
CROATIA AIRLINES
CSP IBERIAN VALENCIA TERMINAL SAUSA
Cyprus Ports Authority
DAF TRUCKS NV
DAIMLER AG
DAMEN BV
DANA TM4 ITALIA
Dancer Bus
DANFOSS EDITRON OY
DANISH MARITIME AUTHORITY
DANISH ROAD DIRECTORATE
DASSAULT AVIATION
DB CARGO AG
DB NETZ AG
DCP DUTCH CARGO PURCHASE BV
DE VLAAMSE WATERWEG
DECO ASSOCIATION
DELLA BERNARDINA FLLI SRL
DEMA SPA
Département de l'Isère
Department for Infrastructure Northern Ireland
Department for Transport (UK)
Department of Transport (Ireland)
DETROIT ELECTRIC GROUP
DEUTSCHE BAHN AG
DEUTSCHE LUFTHANSA AKTIENGESELLSCHAFT
DEUTZ AG
DFDS A/S
DFS DEUTSCHE FLUGSICHERUNG GMBH
DHL FREIGHT GMBH
DIANA SHIPPING SERVICES SA
DIEHL AVIATION GMBH
DINEX ECOCAT OY
DIRECCIÓN GENERAL DE CARRETERAS - MINISTERIO DE TRANSPORTES MOVILIDAD Y AGENDA URBANA
DIRECCIÓN GENERAL DE LA MARINA MERCANTE
DIRECCION GENERAL DE TRAFICO - MINISTRY OF INTERIOR
DIRECTION DES SERVICES DE LA NAVIGATION AERIENNE
DISTRIBUTORI ECOS SRL
D-LOG Transportes LDA
DOLDERMAN BV
DONEGAL COUNTY COUNCIL
DOUROGAS SA
DRAGAGES-PORTS
DUFOUR AEROSPACE
Duisburger Hafen AG (DUISPORT)

DUNDEE CITY COUNCIL
EASYJET AIRLINE COMPANY LIMITED
EATON ELEKTROTECHNIKA SRO
E-DISTRIBUZIONE SPA
EEIG Atlantic Corridor
EEIG Baltic-Adriatic Corridor
EEIG Corridor Rhine-Alpine EWIV
EEIG ERTMS USERS GROUP
EESTI RAUDTEE
EGILE MECHANICS SL
EIDESVIK SHIPPING AS
EIDSVAAG AS
ELENGY SA
ELRINGKLINGER GROUP
ELRON
EMEL – Empresa Municipal de Mobilidade e Estacionamento de Lisboa
Emerald Green Maritime Limited (MITSUI OSK LINES LTD)
EMPRESA MARTIN S.A. (GRUPO RUIZ)
EMPRESA MUNICIPAL DE TRANSPORTES DE MADRID SA
ENAGAS SA
ENAIRE
ENAV SPA
ENTE VASCO DE LA ENERGIA
E-PORT-LINER HOLDING BV
EQUINOR ENERGY AS
ERMEWA SA
ERTICO-ITS EUROPE
E-SHUTTLE GMBH
ESK SA
ESL SHIPPING LTD
ESSENCE Motocycles
E-TRUCKS EUROPE BVBA
EUROCITIES ASBL
EUROPEAN FERRY COMPANY (INTERFERRY)
EUROPEAN HYDROGEN ASSOCIATION
EUROPEAN PASSENGERS' FEDERATION IVZW
EUROPEAN SHIPPERS' COUNCIL
EUROPORT RAUMA OY
EUROVIA MANAGEMENT
EVEKTOR SRO
EWTC - East West Transport Corridor Association
EXMAR MARINE
F LLI CODOGNOTTO DI CODOGNOTTO GIANFRANCO&C SNC
FAIVELEY TRANSPORT ITALIA SPA (WABTEC)
FAURECIA
FCA SPA (now STELLANTIS)
FEDERATION INTERNATIONALE DE L'AUTOMOBILE
Fenris Motorcycles
FERGUSON MARINE ENGINEERING LTD
FERROVIAL CORPORACION S.A.
FERROVIENORD SPA
FEV EUROPE
FINCANTIERI SPA
FINNLINES PLC
Flemish Agency for Roads and Traffic
FLEMISH GOVERNMENT - DEPT. MOW
FLOYD ZRT.
FLUGHAFEN STUTTGART GMBH (STUTTGART AIRPORT)
FM LOGISTIC
FNM SPA
FOKKER TECHNOLOGIES HOLDING BV
FORD MOTOR
FORD OTOMOTIV SANAYI ANONIM SIRKETI
FORSCHUNGSVEREINIGUNG SCHIFFBAU UNDMEERESTECHNIK E.V.
FORSEA FERRIES
FPT INDUSTRIAL
FRAIKIN FRANCE
FRANCE MANCHE AS - EUROTUNNEL (GETLINK GROUP)
FRED.OLSEN, S.A.
FREIE HANSESTADT BREMEN
FRENI BREMBO SPA
FUORIMURO - SERVIZI PORTUALI E FERROVIARI S.R.L.
FUTURE PROOF SHIPPING BV
GARDNER DENVER LIMITED
GAS NETWORKS IRELAND
GAS2MOVE SL (LLEWO)
GASFIN SA
GASNAM
GAVLE HAMN AB
GAZELLE TECH
GAZOCEAN
GCA LOGISTIQUE
Gdansk University of Technology
GDYNIA Maritime University
GE AVIATION LIMITED
GEMEENTE EINDHOVEN
GEMEENTE HELMOND
Gemeente Nijmegen
GEMEENTE TERNEUZEN
General Directorate for National Roads and Motorways
GEVEKE WERKTUIGBOUW BV
GEVEN SPA
GILBERT DE CLERCQ NV
GKN AEROSPACE SWEDEN AB
GKN DRIVELINE INTERNATIONAL GMBH
GLOBAL MARITIME ENTERPRISES LTD
GO4 SRO
GOMORE APS
GOODRICH ACTUATION SYSTEMS
GOTEBORGS HAMN AB
GOTEBORGS KOMMUN
Grad Zadar
GRAF SPA
GRAND PORT MARITIME DE BORDEAUX
GRAND PORT MARITIME DE DUNKERQUE
GRAND PORT MARITIME DE MARSEILLE
Grand Port Maritime de Nantes Saint-Nazaire
Grand Port Maritime de Rouen
GRAND PORT MARITIME DU HAVRE
GREEN CARGO AB
GREEN TOMATO CARS LIMITED
GREENWAY INFRASTRUCTURE S.R.O.
Grenoble-Alpes Métropole
GRIMALDI DEEP SEA SPA
GRIMALDI EUROMED SPA
GROUP ARRIVA SLOVENIA
GROUP SAMAT S.A.
GROUPE GALERIES LAFAYETTE
GROUPE PSA (now STELLANTIS)
GRUPA LOTOS SA
GRUPO ALONSO
GRUPO DISA
GRUPO HAM
GRUPO RENFE SA
GRUPO SOUSA SGPS
GRUPO TORO & BETOLAZA
Gruppo Torinese Trasporti S.P.A.
GTAX RAIL AUSTRIA GMBH
GVB ACTIVA BV
HALLANDSTRAFIKEN
HAMBURGER HOCHBAHN AG
HANS LEHMANN KG
HAROPA GIE
HAVI LOGISTICS UNIPESSOAL LDA
HEART AEROSPACE AB
HEATHROW AIRPORT LIMITED
HECTOR RAIL AB
Heilbronn University of Applied Sciences
HEINZMANN GMBH & CO KG
HELLENIC AEROSPACE INDUSTRY SA
HELLENIC ASSOCIATION OF TOLL ROAD NETWORK - HELLASTRON
HELLENIC PETROLEUM
Hellenic Seaways Maritime S.A.
Hellenic Shortsea Shipowners Association
HELSINGBORG HAMN AB
Heraklion Port Authority S.A.
HERNING KOMMUNE
Hessen Mobil - Straßen- und Verkehrsmanagement
HEULIEZ BUS
HEVIZ-BALATON AIRPORT
HGM ENERGY GMBH
HIGAS SRL
HITACHI EUROPE LIMITED
HITACHI RAIL STS SPA
HONDA R&D EUROPE (DEUTSCHLAND) GMBH
HUNGAROCONTROL ZRT.
HUPAC INTERMODAL NV
HUTCHINSON SA
HUTCHISON PORTS VENLO
HyCologne - Wasserstoff Region Rheinland e.V.
HYDROGEN EUROPE
HYDROGEN SWEDEN
HYPE-STEP
HYSOLUTIONS GMBH
HYSTER-YALE EUROPE
HYUNDAI EUROPE
HŽ INFRASTRUKTURA d.o.o.
IBERIA LINEAS AEREAS DE ESPANA SA OPERADORE
ICCT - INTERNATIONAL COUNCIL ON CLEAN TRANSPORTATION EUROPE GGMBH
ICLEI EUROPEAN SECRETARIAT GMBH
IGOUMENITSA PORT AUTHORITY SA
ILIADIS CARGO SA
INDUSTRIA DE TURBO PROPULSORES S.A.U.
INECO S.A.
INFINEON TECHNOLOGIES AG
INFRABEL SA
INFRAESTRUTURAS DE PORTUGAL SA
INFRASTRUCTURE MALTA
INGENIERIA TECNICA DEL TRASNPORTE TRIA SA
INNIO JENBACHER GMBH & CO OG
Intelligent Transport Systems Romania – ITS Romania
INTERNATIONAL ROAD FEDERATION
INTERPORTO BOLOGNA S.P.A.
INTERPORTO DI VADO V.I.O. SPA
INTERPORTO PADOVA S.P.A.
Interregional Alliance for the Rhine-Alpine Corridor EGTC
INVERSORA MELOFE SL
IRIZAR E-MOBILITY SL
IRIZAR S COOP
IRU - INTERNATIONAL ROAD TRANSPORT UNION
ISRAEL AEROSPACE INDUSTRIES LTD. (IAI)
i-Trans - Association "Transports Terrestres Promotion"
ITS MOBILITY GMBH
ITS SPAIN
IVECO SPA
J.A.M DE RIJK B.V.
JAC ITALY DESIGN CENTER SRL (JAC MOTORS)
JACKY PERRENOT
Jaguar Land Rover
JIHOSTROJ AS
JOHN DEERE FORESTRY OY
JSC VEJO PROJEKTAI
KARLSHAMNS HAMN AB
KAUTEX TEXTRON
KLAIPEDOS MIESTO SAVIVALDYBES ADMINISTRACIJA
KLAIPEDOS NAFTA SC
KNORR-BREMSE SYSTEME FUR SCHIENENFAHRZEUGE GMBH
KNUTSEN OAS ESPANA SL
KNV - KONINKLIJK NEDERLANDS VERVOER
KOBENHAVNS KOMMUNE
KOEDOOD DIESELSERVICE BV
KOMBIVERKEHR GMBH
KONECRANES

KONGSBERG MARITIME AS
KONIG METALL GMBH CO KG
KOSAN CRISPLANT A/S
KOTUG INTERNATIONAL BV
KOUKOUZELIS A.S. & SIA E.E.
KUEHNE+NAGEL AG
KUWAIT PETROLEUM ITALIA SPA
LA COMPOSITE SRO
LAER SPA
LANDESHAUPTSTADT DRESDEN
LANDESHAUPTSTADT MUENCHEN
LANDI RENZO SPA
LANGH GROUP OY AB
LATECOERE SA
Lavar Shipping Co. Ltd
LCA LOGISTIK CENTER AUSTRIA SUD GMBH
LDZ - LATVIJAS DZELZCELS
LEONARDO SPA
LETOVE PREVADZKOVE SLUZBY SLOVENSKEJ REPUBLIKY, STATNY PODNIK
LHG - Lübecker Hafen-Gesellschaft mbH
LIEBHERR SA
LIEBHERR AEROSPACE
LILIUM AVIATION
LINDE AG
LINEAS N.V./S.A.
Link Campus University
LIQUIMET SPA
LIQVIS GMBH
LKAB
LMG MARIN
LNG CROATIA LLC
LOGITREN FERROVIARIA SA
LOHR ELECTROMECANIQUE
London Buses Services LTD
LOTOS PALIWA SP Z.O.O.
LUBECK PORT AUTHORITY
LUFTFARTSVERKET
Luleå Hamn AB
LUX EXPRESS
MACHINEFABRIEK BOLIER BV
MADRID CALLE 30 S.A.
Magna Powertrain Engineering Center Steyr GmbH & Co KG
MAGNA STEYR AG
MAGNAGHI AERONAUTICA SPA
MAGNETIC SYSTEMS TECHNOLOGY LIMITED (MAGTEC)
MAGYAR MAGÁNVASÚT ZRT.
MAHLE INTERNATIONAL GMBH
MALMO STAD
MALTA AIR TRAFFIC SERVICES LIMITED
MAN ENERGY SOLUTIONS SE
MAN TRUCK & BUS SE
MARELLI EUROPE SPA
MARFLET MARINE INTERNATIONAL SA
Maritime Technology Cluster FVG S.c.a r.l.
Mavel Powertrain
MECAPROM
MEDITERRANEAN RAIL FREIGHT CORRIDOR
MEDWAY – OPERADOR FERROVIÁRIO DE MERCADORIAS S.A.
MEGGITT AEROSPACE LIMITED
MERCEDES-BENZ AG
MERCEDES-BENZ TURK AS
MERCITALIA INTERMODAL SPA
MERCITALIA RAIL SRL
MERITAITO OY (ARCTIA)
MESTNA OBCINA VELENJE
Métropole - Aix - Marseille - Provence
METROPOLE DE LYON
MEYER WERFT PAPENBURG GMBH & CO KG
MICHELIN
Ministère de la Mobilité et des Travaux Publics-MMTP
Ministerie van Infrastructuur en Milieu
Ministerie van Infrastructuur en Waterstaat - Rijkswaterstaat
Ministério das Infraestruturas e da Habitação (MIH)
MINISTERIO DE FOMENTO
Ministério do Planeamento e das Infraestruturas
MINISTERO DELLE INFRASTRUTTURE E DEI TRASPORTI
Ministrstvo za infrastrukturo (Ministry of Infrastructure)
Ministry for ecological Transition - Ministry of Transport - MTE
Ministry for Innovation and Technology (Hungary)
Ministry for Transport & Infrastructure of Malta
MINISTRY OF DEVELOPMENT AND INVESTMENTS GREECE
Ministry of Economic Affairs and Communications of the Republic of Estonia
Ministry of Economy, Infrastructure, Maritime and Tourism
MINISTRY OF INFRASTRUCTURE AND TRANSPORT GREECE
MINISTRY OF INFRASTRUCTURE SWEDEN
MINISTRY OF TRANSPORT AND COMMUNICATION OF FINLAND
Ministry of Transport and Communications of the Republic of Lithuania
Ministry of Transport of the Republic of Latvia
Minoan Lines Shipping S.A.
MOBILITY MOTORS SWEDEN AB
Møller Mobility Group
MONFORT LOGISTICA S.L.
MOTEG GMBH
MOTHERSON GROUP
MSE INTERNATIONAL
MT-PROPELLER ENTWICKLUNG GMBH
MTU AERO ENGINES AG
MTU FRIEDRICHSHAFEN GMBH
Multi-Link Terminals Ltd Oy
MUNICIPALITY OF CELJE
MUNICIPALITY OF EILAT
MUNICIPALITY OF KOPER
MUNICIPALITY OF LAVREOTIKI
MUNICIPALITY OF SOSTANJ
Municipio do Fundão
MUNICIPIU RESEDINTA DE JUDET CONSTANTA
MUTUALISTA AÇOREANA - TRANSPORTES MARÍTIMOS S.A.
MZA SP. Z.O.O.
National Company for Road Infrastructure Administration
National Company Maritime Ports Administration SA Constanta
NATS (EN ROUTE) PUBLIC LIMITED COMPANY
NAVAL GROUP
NAVANTIA SA
NCE MARITIME CLEANTECH
Neander Shark GmbH
Neoptera Aero
Neptune Lines Shipping & Managing Enterprises S.A.
NETHERLANDS MARITIME TECHNOLOGY
NETWORK RAIL INFRASTRUCTURE LIMITED
NEWCASTLE CITY COUNCIL
NEXT Electric Motors
Niedersächsisches Ministerium für Wirtschaft, Arbeit, Verkehr und Digitalisierung
NIESTERN-SANDER REPARATIE BV
NISSAN EUROPE
NMBS/SNCB NV/SA
NOMAGO D.O.O.
NOORD-HOLLAND
NORDIC RE-FINANCE AB
NORD-MICRO GMBH & CO OHG
NORLED AS
NORTH EAST SCOTLAND TRANSPORT PARTNERSHIP
NORTH SEA PORT NV
NORTH SEA SHIPPING AS
NORWEGIAN COASTAL ADMINISTRATION
NORWEGIAN PUBLIC ROADS ADMINISTRATION
NOVA AIRLINES AB
NRIC - National Railway Infrastructure Company
NSB GROUP
NUOVO PIGNONE (BAKER HUGHES)
NVR - Zweckverband Nahverkehr Rheinland
ÖBB-Infrastruktur AG
OBSHTINA RUSE
OFFICINE MECCANICHE IRPINE SRL
OGP GAZ SYSTEM S.A.
OMPI SRL
Organisation of Consumers and Users (OCU)
ORKNEY ISLANDS COUNCIL
OSLO KOMMUNE
OTOKAR OTOMOTIV VE SAVUNMA SANAYI AS
OV-BUREAU GRONINGEN EN DRENTHE
Oxelösunds Hamn AB
PATENTES TALGO SL
Patras Port Authority S.A.
PAU BEARN PYRENEES MOBILITES
PCDC - PIRAEUS CONSOLIDATION AND DISTRIBUTION CENTER
PD Teesport Limited
PELLENC GROUP
PEUGEOT MOTOCYCLES
PIAGGIO & C S.P.A.
PIAGGIO AERO INDUSTRIES SPA
PIERBURG GMBH
PIPISTREL AIRCRAFT
PIRAEUS CONTAINERS TERMINAL SA
PIRAEUS EUROPE ASIA RAIL LOGISTICS, S.A. (PEARL S.A.)
PIRAEUS PORT AUTHORITY S.A.
PIRELLI
PKM PRZEDSIEBIORSTWO KOMUNIKACJI MIEJSKIEJ SP Z.O.O.
PKP CARGO INTERNATIONAL A.S.
PKP POLSKIE LINIE KOLEJOWE S.A.
PLASTIC OMNIUM ADVANCED INNOVATION AND RESEARCH
PLUS METAFORIKI IKE
PMC PERSONAL MOBILITY CENTER NORDWEST EG
POLFERRIES SA
POLIS - PROMOTION OF OPERATIONAL LINKS WITH INTEGRATED SERVICES, ASSOCIATION INTERNATIONALE
POLITECNICO DI MILANO
POLITECNICO DI TORINO
POLSKIE ZAKLADY LOTNICZE
PON POWER BV
PORSCHE AG
PORT AUTHORITY OF BILBAO
PORT AUTHORITY OF CARTAGENA
PORT AUTHORITY OF GIJON
PORT AUTHORITY OF HUELVA
PORT AUTHORITY OF MELILLA
PORT AUTHORITY OF RAFINA SA
Port Authority of Santa Cruz de Tenerife
PORT AUTHORITY OF SEVILLE
PORT AUTHORITY OF TARRAGONA
PORT AUTHORITY OF VIGO
PORT AUTONOME DE STRASBOURG
PORT OF ANTWERP
PORT OF BILBAO AUTHORITY
Port of Cork Company
PORT OF FREDERIKSHAVN
PORT OF GDYNIA AUTHORITY SA
PORT OF HAMINA KOTKA LTD
PORT OF HELSINKI LTD
PORT OF KOPER

Port of Moerdijk N.V.
PORT OF NAANTALI LTD
Port of Raahe Ltd
PORT OF ROTTERDAM
PORT OF TURKU LTD
PORT OF YSTAD
PORT OF ZEEBRUGGE
PORTO ANTICO DI GENOVA SPA
PORTOS DOS AÇORES S.A.
PORTS OF NORMANDY
PORTSMOUTH INTERNATIONAL PORT
Poznan University of Technology
PRIMAFRIO SL
PROBUNKERS
PRORAIL BV
PROVINCE OF LIMBURG
PROVINCIE ANTWERPEN
Provincie Gelderland
Provincie Noord-Brabant
Provincie Utrecht
PROVINCIE ZEELAND
PROVINCIE ZUID-HOLLAND
PSA ANTWERP NV
Public Works Department – Ministry of Communications and Works, Republic of Cyprus
PUERTOS DEL ESTADO
PVF SCHIENENFAHRZEUGE SRO
RACC - REIAL AUTOMÒBIL CLUB DE CATALUNYA
RAIL CARGO AUSTRIA AG
RAIL SERVICE CENTER ROTTERDAM BV
RAILNETEUROPE
RB RAIL AS
REDERI AB ECKERO
REGANOSA
REGION BLEKINGE
REGION GAVLEBORG
REGION NORMANDIE
REGION OF CENTRAL MACEDONIA
REGION SKANE
Regionalverband FrankfurtRheinMain
Regionalverband Mittlerer Oberrhein
Regionalverkehr Köln GmbH
REGIONE VENETO
REMONTOWA LNG SYSTEMS SP. Z.O.O.
REN Gasodutos, S.A.
RENAULT SAMSUNG MOTORS
RENAULT SAS
RFI RETE FERROVIARIA ITALIANA S.P.A.
Rheinbahn AG
RHEINMETALL AUTOMOTIVE
RHEIN-NECKAR-VERKEHR GMBH
RIGAS SATIKSME SIA
Rimorchiatori Riuniti Panfido & C. SRL
Road and Motorway Directorate of the Czech Republic
ROAD INFRASTRUCTURE AGENCY
ROBERT BOSCH GMBH
ROLANDE BV
ROLLS-ROYCE
ROMA CAPITALE
ROMA SERVIZI PER LA MOBILITA SRL
ROMAERO SA
ROSETTI MARINO SPA
ROSTOCK PORT GMBH
ROTAREX S.A.
Rotterdam Short Sea Terminals B.V.
ROTTERDAMSE ELEKTRISCHE TRAM N.V.
RUTER AS
SAAB AB
SAAB TRASPONDERTECH AB
SAFRAN AIRCRAFT ENGINES
SAFRAN ELECTRONICS & DEFENSE
SAFRAN HELICOPTER ENGINES
SAFRAN LANDING SYSTEMS
SAFRAN NACELLES
SAFRAN POWER UNITS
SAFRAN SA
SAFRAN SEATS
SAG MOTION GMBH
SAGGAS SA
SAM ALGECIRAS SL
SANEF SA
SAN-JOSE LOPEZ S.A.
SANTANDER PORT AUTHORITY
SANTIERUL NAVAL DAMEN GALATI SA
SANTOS & VALE LDA
SAPA GROUP SPA
SAS DUNKERQUE LNG
SASA SPA AG SOCIETA AUTOBUS SERVIZID'AREA SPA
SCALE GAS SL
SCANDINAOS AB
SCANDLINES GEDSER-ROSTOCK APS
SCANIA AB
SCHAEFFLER TECHNOLOGIES AG & CO. KG
SCHEEPSWERF DAMEN GORINCHEM BV
SCHIPHOL NEDERLAND BV
SCHMITZ CARGOBULL AG
SCHWEIZERISCHE BUNDESBAHNEN SBB
SCOOBIC
SE Klaipeda State Seaport Authority
SEA EUROPE
SEAT SA
SEEHAFEN KIEL GMBH & CO. KG
SEOPAN - Asociación de Empresas Constructoras y Concesionarias de Infraestructuras
SERFIM GROUP
Servei Català de Trànsit
SERVICIOS TERRESTRES Y MARITIMOS SA (SETEMAR)
SHELL
SHFCA - Scottish Hydrogen & Fuel Cell Association
Shipping Company of Crete S.A. (ANEK Lines)
SHIPYARD GEBR. KOOIMAN BV
SIA DOBELES AUTOBUSU PARKS
SICAMB - SPA
SIEMENS AG
SIEMENS ENGINES SAU
SIEMENS MOBILITY GMBH
SJ AB
SKANETRAFIKEN
SKYGUIDE
SLCA - SERVICIOS LOGISTICOS DE COMBUSTIBLE DE AVIACION SL
SLOCAT FOUNDATION
SLOVENSKE ŽELEZNICE – POTNIŠKI PROMET D.O.O.
SNAM 4 MOBILITY SPA
SNCF RESEAU
SOBY VAERFT AS
SOCIETÀ AUTOBUS SERVIZI D'AREA SPA- STADTISCHER AUTOBUS SERVICE AG
SOCIETA' PER AZIONI ESERCIZI AEROPORTUALI S.E.A.
SOCIETE DES TRANSPORTS INTERCOMMUNAUX DE BRUXELLES SSF
SOCIETE DU GRAND PARIS
SOFITEC AERO SL
SOLARIS BUS & COACH
Solihull Metropolitan Borough Council
Solution F
SOMTRANS
SONACA GROUP
Sono Motors
SPRAVA ZELEZNIC
STAD ANTWERPEN
STADT AACHEN
STADT KOLN
STADT ULM
STADT VILLACH
Stadtwerke Hürth AöR
STADTWERKE OSNABRUCK AG
STAR BULK SHIPMANAGEMENT CO. (CYPRUS) LTD
STEMMANN-TECHNIK GMBH
STENA LINE SCANDINAVIA AB
STENA REDERI AB
STEYR MOTORS GMBH
STOCKHOLM SKAVSTA FLYGPLATS AB
STOCKHOLMS HAMN AB
STOCKHOLMS STAD
STOLT NIELSEN LTD
STRAETO BS
Strasbourg Eurometropole
SUARDIAZ GROUP
SUMY
SVEALANDSTRAFIKEN AB
SVITZER A/S
SWDAVIA AB
SWEDISH MARITIME ADMINISTRATION
SWEDISH TRANSPORT ADMINISTRATION
SWISS INTERNATIONAL AIR LINES AG
Syndicat mixte des mobilités de l'aire grenobloise (SMMAG)
Syndicat Mixte des Transports en Commun de l'agglomération toulousaine
Syndicat Mixte pour la gestion des Ports du Sud Alsace
SYNDICAT MIXTE REGIONAL DES PORTS DE CAEN-OUISTREHAM ET CHERBOURG
TAB TRANSPORTS SA
TAKARGO – TRANSPORTES DE MERCADORIAS S.A.
TAMPEREEN KAUPUNKI
TARGU MURES TRANSYLVANIA AIRPORT
TATRAVAGONKA AS
TAXIWAY
TBP D.D.
TELAIR INTERNATIONAL AB
TEMPUS-TRANS S.R.O.
TENNECO AUTOMOTIVE EUROPE BVBA
TERMINAL DE CONTENIDORS DE BARCELONA, S.L.
TERMINAL LINK SAS
TEVVA MOTORS LIMITED
THIEN EDRIVES GMBH
TIEL - TRANSPORTES E LOGISTICA S.A.
TIRSAN TREYLER SANAYI VE TICARET AS
TJA - TRANSPORTES J.AMARAL S.A.
TOFAS TURK OTOMOBIL FABRIKASI ANONIM SIRKETI
TORQEEDO
TOTAL SA
TOYOTA MOTOR EUROPE
TRAFIKSELSKABET MOVIA
TRAINOSE SA
TRANSDEV GROUP
TRANSFESA LOGISTICS S.A.
Transilvania University of Brasov
TRANSPORT MALTA
TRANSPORTES AÉREOS PORTUGUESES, S.A.
TRANSPORTES CENTRAL POMBALENSE LDA
TRANSPORTES FIGUEIREDO & FIGUEIREDO LDA
TRANSPORTES PASCOAL S.A.
TRANSPORTES PAULO COSTA & FERREIRA LDA
TRANSPORTES PAULO DUARTE LDA
TRANSPORTES SÉRGIO LUDOVINO LDA
TRANSPORTS DE BARCELONA SA
TRELLEBORG SEALING SOLUTIONS FRANCE SAS
TRENTINO TRASPORTI SPA
TRIESTE TRASPORTI SPA
TRIFLEET LEASING BV
TRIUMPH AEROSPACE OPERATIONS UK LTD
TT TRANSCOM - POINTER LINES
TUCO YACHT VAERFT APS
TURUN KAUPUNKILIIKENNE OY
TX LOGISTIK AG

UIRR INTERNATIONAL UNION FOR ROAD-RAIL COMBINED TRANSPORT
UMBRAGROUP SPA
UNIFE - Union of European Railway Industries
UNILEVER BV
UNION INTERNATIONALE DES TRANSPORTS PUBLICS
UNIONTRASPORTI
Universidad Autonoma de Madrid
Universidad Cardenal Herrera
Universidad Carlos III de Madrid
Universidad Complutense de Madrid
Universidad de Alcalà
Universidad de Almeria
Universidad de Burgos
Universidad de Cadiz
Universidad de Cantabria
Universidad de Cordoba
Universidad de Extremadura
Universidad de Granada
Universidad de Jaèn
Universidad de la Laguna
Universidad de la Rioja
Universidad de Las Palmas de Gran Canaria
Universidad de Leon
Universidad de Malaga
Universidad de Murcia
Universidad de Navarra
Universidad de Salamanca
Universidad de Valladolid
Universidad de Vigo
Universidad del País Vasco / Euskal Herriko Unibertsitatea
Universidad Europea
Universidad Francisco de Vitoria
Universidad Miguel Hernandez
UNIVERSIDAD POLITECNICA DE MADRID
Universidad Rey Juan Carlos
Universidad San Pablo CEU
Universidade de Coruna
Università degli Studi della Basilicata
Università degli Studi della Campania "Luigi Vanvitelli"
Università degli Studi dell'Insubria
Università degli Studi di Brescia
Università degli Studi di Cassino e del Lazio Meridionale
Università degli Studi di Catania
UNIVERSITA DEGLI STUDI DI FIRENZE
Università degli Studi di Milano-Bicocca
Università degli Studi di Perugia
Università degli Studi di Torino
Università degli Studi ROMA TRE
Università di Bologna
Università di Camerino
Università di Parma
Università di Pavia
Università LUISS Guido Carli
Universitat Abat Oliba CEU
Universitat de Barcelona
UNIVERSITAT DE GIRONA
Universitat de Lleida
Universitat de Valencia
Universitat Hamburg
Universität Hildesheim
Universitat Jaume I
UNIVERSITAT POLITECNICA DE CATALUNYA
UNIVERSITAT POLITECNICA DE VALENCIA
Universitat Pompeu Fabra
Universitat Rovira i Virgili
Universitdad San Jorge
University di Genova
University of Gothenburg
University of Hertfordshire
University of Stuttgart
University of Trás-os-Montes e Alto Douro
University of Worcester
University of Zagreb
Universotà di Siena
Univrsidad de Zaragoza
UPS EUROPE SA
URBAN ELECTRIC MOBILITY INSTITUTE (UEMI) GGMBH
URBEEZ
UTKILEN AS
Utrecht University of Applied Sciences
VALEO
VALEO SIEMENS EAUTOMOTIVE GERMANY GMBH
VALSTYBES IMONE ORO NAVIGACIJA
VAN ECK TRAILERS BV
VARSINAIS-SUOMEN LIITTO
VDL GROUP
VENICE LNG S.P.A.
VEPLAS GROUP
VERBAND DER BAHNINDUSTRIE IN DEUTSCHLAND (VDB) EV
Verband Region Rhein-Neckar
Verkehrsverbund Mainz-Wiesbaden GmbH (VMW)
VIESOJI ISTAIGA KLAIPEDOS KELEIVINIS TRANSPORTAS
VIIA
VIKING LINE ABP
VILLE DE PARIS
VISION SYSTEMS AERONAUTICS
VITESCO TECHNOLOGIES GMBH
Vlaamse Vervoersmaatschappij De Lijn
VNF - VOIES NAVIGABLES DE FRANCE
VOLKSWAGEN AG
VOLOCOPTER GMBH
VOLVO AB
VOLVO BUS CORPORATION
VOLVO CARS
VOLVO Trucks
VOS LOGISTICS OSS BV
VTG RAIL EUROPE GMBH
WABCO
WAERTSILA GAS SOLUTIONS AS
WAGENBORG SHIPPING BV
WARTSILA
WATERSTOFNET VZW
WESSEM HOLDING BV
WIENER LINIEN GMBH &CO KG
WILH WILHELMSEN HOLDING ASA
WINTERTHUR GAS & DIESEL AG
WIZZ AIR HUNGARY LEGIKOZLEKEDESI KORLATOLT FELELOSSEGU TARSASAG
WIZZ AIR UK LIMITED
WRIGHTBUS
WSW MOBIL GMBH
YESILOVA HOLDING AS
ZAKLADY LOTNICZE MARGANSKI & MYSLOWSKI SA
ZEEBRUGGE PORT AUTHORITY
Zéphyr & Borée
ZF FRIEDRICHSHAFEN AG
ZODIAC AEROTECHNICS (SAFRAN)
ZPMC SLU
ZSR - Železnice Slovenskej Republiky
ZSSK - ZELEZNICNA SPOLOCNOST SLOVENSKO
ZSSK CARGO
CLEPA
EICB
EPOMM
ERRAC
ERRIN
ERTRAC
UIC – International Union of Railways
UITP – International Association of Public Transport
WATERBORNE
Smart Freight Centre

11.3. FINANCE

The list below corresponds to all the entities that have been considered under the finance category. The total number of entities is 223.

EIF/BlueInvest
EIF (European Investment Fund)
F6s
Techstars
EIT/EIT Urban Mobility
EIT/EIT InnoEnergy
EIT/EIT Climate-KIC
EIT/EIT Digital
EFSI (European Fund for Strategic Investment)
ESI Funds (European Structural and Investment Funds)
EIB (European Investment Bank)
EC (European Commission)
EIC (European Investment Council)
INVESTITIONSBANK SCHLESWIG-HOLSTEIN
HAMBURGISCHE INVESTITIONS- UND FORDERBANK
IBAN - ITALIAN BUSINESS ANGELS ASSOCIATION
MERCATOR LEASING GMBH & CO.
KfW Group
INFORTAR AS
STOLT NIELSEN GAS B.V.
SCANIA GROWTH CAPITAL
VOLVO GROUP VENTURE CAPITAL AB
CREDIT AGRICOLE
SFBW LANDESANSTALT SCHIENENFAHRZEUGE BADEN-WUERTTEMBERG (AöR)
Bpifrance
Caisse des Dépôts et Consignations (CDC)
Council of Europe Development Bank (CEB)
EBAN
Instituto de Credito Oficial
THE WORLD BANK
VINNOVA
ANI - AGENCIA NACIONAL DE INOVACAO
INNOVIRIS
Flanders Innovation & Entrepreneurship
NETHERLANDS ENTERPRISE AGENCY
CDTI
Ministry of Economic Development and Technology
Innovate UK
Austrian Research Promotion Agency (FFG)
MIUR - Ministero dell'Istruzione, Ministero dell'Università e della Ricerca
National Centre for Research and Development (NCBR)
TUBITAK
Research Council of Norway
INNOSUISSE - SWISS INNOVATION AGENCY

BUSINESS FINLAND
Innovation Fund Denmark
DLR Projektträger
Investment AB Latour
InnovationsKapital
Chalmers Ventures
Israel Innovation Authority
National Research, Development and Innovation Office (NRDI)
Unternehmertum Venture Capital (UVC) Partners
DCP - DIFFUSION CAPITAL PARTNERS
INNOGEST CAPITAL
ENEL STARTUP
Intesa Sanpaolo Innovation Center
ENAGAS EMPRENDE
CO-PACE (Continental Start-Up Program)
Faurecia Ventures
ABB Technology Ventures
Robert Bosch Venture Capital GmbH
BMW i Ventures
ENGIE New Ventures
Shell Ventures
Reefknot Investments
Saab Ventures
Next47 (Siemens Corporate Venture Capital)
Repsol Corporate Venturing
Total Carbon Neutrality Ventures
CMA CGM Ventures
Plug & Play Ventures
Alliance Ventures
Volkswagen Group
Daimler Technology & Venture
DEUTSCHE BAHN DIGITAL VENTURES GMBH
EDF Pulse Croissance
Air Liquide Venture Capital (ALIAD)
T-Mobile Ventures
INVEN CAPITAL
Future Energy Ventures
EDP Ventures
Indraventures
Galp Ventures
DT Capital Partners
TELEFÓNICA VENTURES
Toyota AI Ventures
PERSEO VENTURE BUILDER
NOKIA GROWTH PARTNERS
Aster Capital
574 Invest
BlackRock
Intel Capital
ATOMICO
BAILLIE GIFFORD
FREIGEIST CAPITAL
LGT BANK AG
OBVIOUS VENTURES
TENCENT HOLDINGS LTD.
AIRBUS VENTURES
NORRSKEN VC
EQT VENTURES
NEXT GEAR VENTURES
HONDA XCELERATOR
SBB STARTUP
GE VENTURES
SAFRAN CORPORATE VENTURES
DIEHL VENTURES GMBH
HONEYWELL VENTURES
BAE Systems Investment in Innovation (I3)
EQUINOR VENTURES
KONGSBERG INNOVATION
LUFTHANSA INNOVATION HUB
Zukunft Ventures
ERICSSON VENTURES
BOEING HORIZON X
MOTHERSON INNOVATION
MAHLE CORPORATE VENTURE CAPITAL
R2 DATA LABS
FORD X
ROAD VENTURES
EuraTechnologies
DEMETER Partners
WeLike
SAMBRINVEST
WeLikeAngels - Investessor
Karot Capital
Expon Capital
PORTUGAL VENTURES
GIANO VENTURES
M Capital Partners
Orevon Venture Partners
Starquest Capital
WakeUp Capital
SpeedInvest
Inventures Investment Partners
btov Partners GMBH
H.I. Capital AG
Luxembourg Business Angel Network
Alter Equity
Lean Fund
finance & invest.brussels
TechAngels
Breega Capital
Estari Group
Basinghall Partners
Acceleration Venture
Amadeus Capital Partners
SFPI-FPIM
GO CAPITAL
3LB SEED CAPITAL
Growth Partners Capital
SOFINDEV MANAGEMENT NV
Odyssée Venture
Fil Rouge Capital
Finaqui Business Angels
EPIC ALFA SP. ZOO
NEXTUP
UNI.FUND
UNIIQ
ENEAS ALTERNATIVE INVESTMENTS
Ostbelgieninvest AG
PRACTICA CAPITAL
TBA Network
Evolem Start
Black Sea Trade and Development Bank (BSTDB)
SAMAIPATA
Clave Capital
PMV
Journey Partners
Iris Capital
Statkraft Ventures
Contrarian Ventures
SHIP2B
CITA Investissement
ING Corporate Investment Belgium
Mustard Seed Maze
Elaia
KARISTA
COREangels Impact
Presto Ventures
Faraday Venture Partners
Mainport Innovation Fund II
White Star Capital
NovX Capital
Verve Ventures (Investiere)
Indufin
BNP Paribas Fortis Private Equity
Société Belge d'Investissement International (SBI)
Waterland Private Equity
Kima Ventures
SRIW SA
KATAPULT OCEAN
Réseau Yeast
Erganeo
Uangel
Jolt Capital
ACT VC Fund
Invest.BW
Sarsia Seed Management AS
Boost HEROES
RAISE VENTURES
Møller Mobility Group
Selvaag Invest
Sustainable Ventures
Venture Kick
Foundation for Technological Innovation (FIT)
Cathay Innovation
OGCI Climate Investments
Idinvest Partners
Northzone
Mubadala Capital | Ventures Europe
Goodwater Capital
SoftBank Vision Fund
InMotion Ventures
MAN Impact Accelerator
Hitachi Ventures Gmbh

12. ANNEX 4 – ABOUT WHEESBEE

Wheesbee (www.wheesbee.eu) is a highly innovative information system offering a one-stop-shop to access, organize, analyse and share relevant information needed for research and technological innovation processes. It is one of the most important tools during Innovation Services.