

A photograph of several white electric buses parked at a charging station with overhead infrastructure. The image is semi-transparent, serving as a background for the main title.

M I S S I O N Z E R O

Powered by **Holland**

Participants brochure
Holland Pavilion

EVS32 2019
Lyon, 19 - 22 May

On a mission. To a zero-emission future

Since 2010, the Netherlands has been working hard – and successfully – to roll out electric mobility. Today, we have one of the world’s densest charging infrastructure networks and are a European leader in sustainable urban mobility and transport and logistics. By 2030, all new passenger vehicles sold in the Netherlands will have to be zero-emission. All 5.000 buses will drive zero emission by 2025, and we have zero emission ambitions as well in freight transport and city logistics. Whether they are hydrogen-electric or battery-electric vehicles, they will all have to make the greatest possible use of renewable energy sources such as wind and solar.

The transition to zero-emission transport offers clear benefits – now and in the future. First, it makes our towns and cities smarter, greener and safer. Secondly, it offers new economic opportunities. Our objective is nonetheless ambitious. We can only achieve it by embracing new knowledge, new standards and a new world. By connecting energy, mobility and ICT. By thinking not of limits but of opportunities, and by sharing what we know. Together, we can make the impossible possible!

So 8 partners got together. Our vibrant cities Amsterdam, Rotterdam and Utrecht, our #1 in innovations province Brabant, our creative automotive cluster “AutomotiveNL”, Netherlands Enterprise Agency “RVO.NL”, the department for ‘Sustainable Mobility’ of the national Ministry for Infrastructure and Water Management and the Embassy of the Kingdom of The Netherlands. We joined forces to offer you facts and figures, insights and practices. We are proud to tell our story together with 30 companies and organisations that have almost 10 years of experience in electro mobility in the Netherlands.

Moreover, we see many opportunities because we want to move forward and expand our horizons, and because we believe that change does not happen of its own accord.

To that end, the Dutch business sector, knowledge institutions and government agencies, are pleased to invite you to join us on our journey to a zero-emission future.

With best regards on behalf of all the Dutch participants to the EVS32 in Lyon,

Mariëtte van Empel
Director for Sustainable Mobility
Ministry for Infrastructure and Water Management

Organizing partners

AutomotiveNL
City of Amsterdam
City of Rotterdam
City of Utrecht
Dutch Embassy of the Kingdom of The Netherlands
NBSO Netherlands Business Support Office Lyon
Formula E-Team (Holland E-mobility)
Ministry of Infrastructure and Water Management
Netherlands Enterprise Agency (RVO)
Province of North-Brabant
Netherlands Enterprise Agency

Co-exhibitors

Alfen
APPM Management Consultants
Association DOET
Automotive Campus
Bals Netherlands B.V.
Brainport Development
Chargepoint Europe B.V.
Cleantron
Coast to Coast Smart eMobility
Count & Create
EBUSCO B.V.
Eco-Movement
ElaadNL
EMEurope
EVConsult B.V.
FIER Automotive
GreenFlux
Heiwegen Consultancy B.V.
Last Miles Solutions
Lightwell B.V.
Mobes
MRA Elektrisch
NKL Netherlands
Royal HaskoningDHV
Sycada Mobile Solutions
TNO Automotive
TSG Group
Vattenfall
VDL Bus & Coach B.V.
WaterstofNet

AutomotiveNL

AutomotiveNL is the cluster organization for the Dutch automotive industry, mobility sector, automotive education sector and has over 170 members. It is financially independent and continues to expand its activities and facilities in this domain. AutomotiveNL was established in 2011 as a Dutch private limited company (BV) when three associations - the Automotive Technology Center, High Tech Automotive Systems and Materials and High Tech Automotive Campus - merged their objectives, operations and resources.

From its base of operations on the Automotive Campus in Helmond, AutomotiveNL performs activities essential to its members with a dedicated, highly experienced team of experts. It is a lean organization with a small permanent staff who manage the workload by bringing in outside contractors on a project-by-project basis and partnering with other organizations. The company is structured into teams that are each in charge of a primary area of activity. These teams meet regularly to discuss developments and possible bottlenecks and coordinate their efforts.

www.automotivenl.com



City of Amsterdam

Amsterdam, zero-emission capital of the world

No city in the world is as far ahead in the transition to electric mobility as Amsterdam. Our accomplishments are rewarded with two E-Visionary awards already, for being the global frontrunner in making the transition to electric transport. On top of this we became the innovation capital of the world in 2016. Amsterdam has developed into a true Living Lab for research institutes, innovation businesses and start-ups in the field of electric transport.

Amsterdam is well on her way reaching the European Standards, the city's air quality has gradually improved in recent years and most places meet the European standards. But as Amsterdam we want to be more progressive and follow the World Health Organisation which sets a standard that is much higher than European standards.

To do this, we will start with the implementation of zero emission policy in the city in three steps: In 2022 Amsterdam will start with a zero emission policy in the city centre, this will increase and concern the area within the ring road A10 by 2025. In 2030 the whole urban area will be emission free. Amsterdam is buzzing with new initiatives and developments, turning into a healthy city for all Amsterdammers and visitors.

www.amsterdam.nl

City of Rotterdam

Rotterdam leading city

A climate neutral city. That is what Rotterdam wants to be. A green and healthy city with clean air for everyone. With an economy that no longer runs on coal, gas and oil, but on clean energy sources such as sun and wind. Rotterdam is fully committed to the energy transition and to become independent of fossil fuels. Electric vehicles are the alternative for fossil cars. To make electric driving possible in Rotterdam, the municipality is currently facilitating around 2.000 public charging points. In 2020 there will be around 12.000 electric vehicles. Rotterdam is one of the leading EV cities in the Netherlands.

Rotterdam experimented with groups of charging stations, fast chargers at gasoline stations and induction charging. Rotterdam also works on zero emission city logistics, electric public transport and shared mobility concepts.

As a city, Rotterdam sets the example. More than 38% of their own fleet is electric, including two electric garbage trucks. In 2030, the total municipal fleet, including the large vehicles has to be electric.

www.rotterdam.nl



City of Rotterdam

City of Utrecht

Utrecht develops a route to zero emission in mobility

Utrecht provides a vibrant, creative, inspirational environment for leading innovators. The city is developing from a medium-sized provincial city into a regional capital of European importance. Utrecht is the fastest growing city of The Netherlands. On top of that, Utrecht is one of the most happy cities in the world according to the United Nations. We believe that Healthy Urban Living in clean air makes people happier.

In mobility we give more space to pedestrians, cyclists and public transport. All other transport must be as clean as possible.

The city is a living lab for innovations in new mobility concepts:

- electric carsharing
- bidirectional charging infrastructure
- mobility as a service.

In Utrecht a social housing corporation will renovate 644 social apartments to nearly zero energy apartments. The energy system by solar panels and heat pumps will be connected with storage batteries and bidirectional charging infrastructure for electric car sharing, electric buses and electric vans. This project contributes to an nearly zero energy district.

www.utrecht.nl



Gemeente Utrecht

Embassy of the kingdom of The Netherlands

Embassy of the Kingdom of the Netherlands in Paris, Economic cluster

One of the main tasks of the Economic Cluster at the Embassy in Paris is to promote and support economic cooperation between France and the Netherlands. This cooperation encompasses not only trade but also cooperation in the field of R&D and innovation, knowledge sharing and bilateral foreign investments. All fields of expertise, Innovation & Science, Agrofood, Infrastructure, Mobility & Water Management and Trade & Investment, are grouped under the Economic Cluster, which also includes NBSOs (Netherlands Business Support Offices) in Nantes and Lyon.

NL <https://www.nederlandwereldwijd.nl/landen/frankrijk/over-ons/ambassade-paris-wie-zijn-wij/afdeling-economisch-cluster>

FR <https://www.paysbasetvous.nl/votre-pays-et-les-pays-bas/france/qui-sommes-nous/ambassade-paris-qui-sommes-nous/pole-economique>

NBSO Netherlands Business Support Office Lyon

NBSO Lyon focuses on promoting and strengthening Dutch economic relations with France by developing a strong local network, mainly in the Great South East of France. The main goal is to support Dutch companies, specifically SMEs, in entering the French market, by providing customized market information, finding business partners or welcoming trade delegations, in collaboration with the Dutch Embassy in Paris. NBSO Lyon also organizes seminars, conferences or site visits.

NL <https://www.rvo.nl/onderwerpen/internationaal-ondernemen/netwerken-en-contacten/buitenlandnetwerk/netherlands-business-support-offices/contact-met-nbso-frankrijk>

FR <https://www.paysbasetvous.nl/votre-pays-et-les-pays-bas/france/qui-sommes-nous/nbso-lyon>



Royaume des Pays-Bas



NBSO Lyon
Netherlands Business Support Office

Formula E-Team (Holland E-mobility)

This public-private platform comprises the business sector, governments and knowledge institutions and was set up in 2010 by the Dutch national government to stimulate developments associated with electric transport. It also has to ensure coordination with developments abroad and capitalise on opportunities for green growth. From the beginning, the Formula E-Team has laid the foundation for many new partnerships and market initiatives.

Members of the Formula E-Team are: 3TU, ANWB (Dutch Automobile Association), AutomotiveNL, BOVAG (association of motor car, garage and allied trades), De Groene Zaak (Dutch Sustainable Business), DOET association (Dutch Organisation for Electric Transport), ElaadNL, Energie Nederland, Ministry of Infrastructure and Environment, Natuur en Milieu (Foundation for Nature Conservation and Environmental Protection, NVDE (Dutch Association for Sustainable Energy), IPO (Interprovincial Consultation), RAI association (Dutch Association of the Bicycle and Automotive Industries), VNA (Association of Dutch Car Leasing Companies) and VNG (Association of Dutch Municipalities).

www.nederlandelektrisch.nl/formula-e-team



**Nederland
Elektrisch**

Het startpunt voor alles wat op stroom rijdt

Ministry of Infrastructure and Water Management

The Ministry of Infrastructure and Water Management is committed to improving quality of life, access and mobility in a clean, safe and sustainable environment.

The Ministry strives to create an efficient network of roads, railways, waterways and airways, effective water management to protect against flooding, and improved air and water quality.

The Holland e-Mobility House is the result of public-private cooperation and part of the Program for Sustainable Mobility of the DG for Mobility, committed to make the transformation towards low and zero emission mobility and transport irreversible.

More information on electro mobility in the Netherlands:

www.nederlandelektrisch.nl/gateway-to-europe



Government of the Netherlands

Netherlands Enterprise Agency

Netherlands Enterprise Agency (RVO.nl) stimulates entrepreneurs in sustainable, agricultural, innovative and international business. It aims to improve opportunities for entrepreneurs, strengthen their position and help them realise their international ambitions with funding, networking, know-how and compliance with laws and regulations.

On behalf of the Dutch Ministry of Infrastructure and Water Management, Netherlands Enterprise Agency is active in the field of sustainable mobility. It stimulates electric driving (battery or hydrogen) by carrying out various forms of support. Furthermore, electric driving is encouraged by setting up partnerships and sharing knowledge at a national and international level.

www.rvo.nl



Netherlands Enterprise Agency

Province of North-Brabant

North Brabant is a province of the Netherlands, located in the south of the country. It borders the provinces of South Holland and Gelderland to the north, Limburg to the east, Zeeland to the west, and the Belgian provinces of Antwerp and Limburg to the south. The Province of Noord-Brabant represents the administrative layer between the national government and the local municipalities. The provincial administration takes initiatives on an economic, social and cultural level and coordinates actions.

The provincial administration of Brabant is primarily concerned with:

- Spatial development
- Accessibility and mobility for the region
- Regional economic policy
- Culture and regional identity

We work together with innovative entrepreneurs and with people who can solve social issues. We help to make dreams come true, to access new markets and turn ground-breaking concepts into tangible products and services.

Together we work to make our cast-iron competitive position more sustainable and to further increase it. That's because Brabant has everything it takes to perform at a global level, whether in terms of our economic position, our technological knowhow, and our society.

www.brabant.nl

Provincie Noord-Brabant

Alfen

With transformer substations, energy storage systems, charging stations for electric vehicles and a large portfolio of other products, Alfen takes on a central role and is a connecting partner in the electricity grid.

With its broad range of in-house developed products and vast experience as system integrator Alfen is dedicated to build the electricity grid of the future: reliable, sustainable and innovative.

Alfen closely cooperates with various grid operators to future-proof the electricity grid. By joining forces with grid operators, Alfen developed innovative solutions such as the charge points for electric vehicles and power grid automation, while also equipping thousands of medium voltage facilities with remote digital fault passage indicators. Furthermore, Alfen's energy storage system TheBattery enables grid operators to manage, store and use decentrally generated energy.

www.alfen.com



ALFEN
POWER TO ADAPT

APPM

Since the introduction of the first EVs in The Netherlands in 2009 we have been active in more than 200 projects on electric mobility and (smart) charging. Internationally we have offices in the United States of America, Belgium, Germany and The Netherlands and are working on a global scale. APPM is a management consulting firm with public and private clients, from energy companies and car manufacturers to local, regional and national governments. We work on topics such as:

- Developing the business models in electric mobility, e.g. investments in charging infrastructure for energy companies;
- Contribute to policies on electric transport, e.g. Dutch national action plan for electric mobility;
- Support regional bodies and cities with the realization of (smart) public charging infrastructure by taking care of public tenders;
- Improving business cases;
- Evaluate current policies and creating long-term visions;
- Bring together stakeholders in formal agreements on zero emission bus transport;
- Realizing new mobility concepts such as the introduction of electric taxis at Amsterdam Schiphol Airport and electric canal cruise boats in the City of Amsterdam.

Our method is characterized by taking initiative. We actively look for opportunities that contribute to the development of electric mobility. Based on our expertise and network we connect stakeholders with each other. We distinguish ourselves by an independent role, extensive knowledge, experience on electric mobility and a wide network of public and private parties. This position makes that we are able to create propositions and can realize projects. Because of this, the introduction of electric mobility is accelerated. For more information, please contact Mr. Harm-Jan Idema (idema@appm.nl) or Mr. Frank ten Wolde (wolde@appm.nl).

www.appm.nl



Association DOET

Since 2009, DOET Association is the dutch industry association for frontrunners in the field of charging infrastructure, light electric vehicles, smart grids, e-sharing and electric cars.

Our mission is 100 percent electric mobility using 100 percent sustainable energy. We are convinced these innovations have a vast environmental and commercial potential.

In cooperation with knowledge institutes, NGOs and Governments we bring E-mobility to a higher level.

DOET wants to expand and exchange its knowledge and network in order to expand E-mobility accross the globe. Is your organisation interested in joining our mission?

Mail us via info@doetdoet.nl.

www.doetdoet.nl

Automotive Campus

The Automotive Campus in Helmond, right in the middle of the Brainport Region, is the national and international hotspot, meetingplace and a potential businesslocation for automotive business. De Automotive Campus offers an attractive environment for learning- and working, a state of the art technology and related (test-) facilities as well as flexible residential concepts.

The Automotive Campus is where the ecosystem for smart & green mobility comes together for meetings, knowledge sharing, innovation, engineering, testing, business development, education and training.

The Automotive Campus in Helmond - located in the Brainport Region - is the national and international hotspot, meeting point and place of business in the field of automotive (technology) and smart mobility.

www.automotivecampus.com



**AUTOMOTIVE
CAMPUS**

Bals

Simple. Well. Connected – For over 60 years

For more than 60 years, Bals Elektrotechnik has been the partner for secure connections. BALS stands worldwide as a quality brand for innovation, reliability and service. The products prove themselves around the world and in a wide variety of applications.

As an independent, medium-sized, family-owned company, Bals produces standardised industrial plugs and sockets and combination units acc. to IEC 309 1-2. For the infrastructure side of the EV market, BALS manufacture the type 1, type 2 and type GB and also many different charging cables, type 2 sockets and EV controllers. The export rate in excess of 50 percent shows: Bals products are highly valued around the world. The products are sold in more than 80 countries.

The ISO-9001-certified production process in all factories ensures the high product quality typical for Bals. Flexibility, customer proximity and the ability to quickly respond to short-term requirements are a matter of course. For this reason, Bals integrated production – from the product idea and design to tool making and production to the shipment of the products – is optimised for short processing paths and the fastest response times.

www.bals.nl



Brainport Development

The economic development company Brainport Development cooperates with many partners on strengthening Brainport Eindhoven; a world-class top region for the high tech manufacturing industry. Close collaboration, sharing knowledge and smart entrepreneurship characterise the open innovation culture which makes Brainport Eindhoven the growth accelerator of the Dutch economy. As an independent and demand-driven organization Brainport Development passionately works on achieving concrete results. Brainport Development develops the regional economic strategy, develops and realizes projects, offers business advice and innovative business premises and promotes Brainport Eindhoven in the Netherlands and abroad.

Our motto is: working together on a strong Brainport Eindhoven.

www.brainport.nl



Chargepoint Europe

Chargepoint Europe supports businesses and governments in switching towards a more sustainable life by developing, installing and exploiting charging infrastructure solutions for electric vehicles.

We use proven technology and business models for implementing electric vehicle charging infrastructure, back office tools and payment solutions. We offer whitelabel services for building your brand and energy load management for buildings and car sharing services.

At Chargepoint Europe, we strongly believe that mobility could and should be sustainable now the world finally is quitting its oil addiction.

Our Customers are in Industry, Utilities, Business-to-Business, Cities and Governments. Unique features:

- Smart Charging / Smart Grid ready / V2G
- Future Proof: open data protocols (OCPP, OSCP, etc)
- Molest Proof
- Real Time Remote Monitoring
- Integrated Payment System (including Parking Systems and Prepaid, EV Roaming)
- High Up time
- Compact housing
- Backoffice System with Management Information Modules
- 43 kW AC Chargers for e-trucks and buses
- 10 years of experience in the largest charging infrastructure market of Europe

www.chargepoint.nl



Cleantron

Applications

Cleantron produces and develops Li-ion Battery Modules. In our automated ISO9001 certified plant in Amsterdam, the Netherlands, we produce Battery Packs for different Market Sectors: Industry 4.0, Agricultural Automation, Light Electric Vehicles and the Automotive Industry.

Low Voltage Product

The Standard Battery Modules that Cleantron produces are 24V, 48V and 72V and are used for instance in LEV's, like special premium e-Bikes, Tri-Cycles and small Delivery Vehicles for Urban Delivery services. Largest part of our business are Tailored Modules especially designed, certified and produced for OEM.

High Voltage Product

For Trucks, Buses and Automotive, Cleantron develops Battery Packs and runs limited Series. Here Cleantron is specialised in Modular Systems.

Production

Cleantron has in-house developed Production Technology that can assemble Cells with resistance welding, laser welding or adhesive bonding. Cells we process are Prismatic and Cylindrical Cells.

Engineering

Cleantron not only performs the mechanical and thermal dynamic Battery Product Design but is also doing the electrical engineering for the Battery Management System (BMS), Hardware and Firmware.

Research

The R&D Program of Cleantron, executed in collaboration with the University of Eindhoven (NL) and Uppsala (Sweden) is focussing on Algorithm D.

www.cleantron.nl

cleantron[®]
cleantech batteries

Coast to Coast Smart eMobility

Both the European and the US West-Coasts are pioneering Smart e-mobility. Governments, universities and companies are co-operating to speed up developments. The two regions have lots in common, facing the same challenges and generating the same business opportunities. So why develop the e-wheel twice, both in Europe and the US? That's where the S4C Smart e-Mobility Program kicks in.

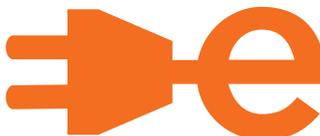
The S4C Smart e-Mobility Program promotes knowledge and innovation exchange between the Dutch and US government, universities and industry in the field of electric- and smart mobility. This 'Holland Westcoast Smart Connection!'- cluster helps to position private organizations on the respective Smart E-Mobility markets to find new business opportunities. The cluster is a private-public partnership: with all partners agreements have been signed aimed to exchange knowledge, share experiences and create opportunities in both regions.

Coast to Coast helps Smart e-Mobility companies to set up shop in both regions; at present eight NL companies have been assisted in the US and three in the NL.

Main activities:

- Organization of seminars/events/trade missions and study tours, both in the US and Europe;
- Development of 'Holland smart E-Mobility House' at Dutch Consulate General, San Francisco;
- Development of bilateral relations between Dutch and US decision makers
- Stimulate and realize pilot projects and new business development;
- Knowledge and innovation dissemination between Dutch and US governments and universities.

www.coast2coast.org



Count & Create

The firm COUNT & CREATE makes new business-cases to solve societal issues in a different way. This is an interesting approach as well for local governments as for profit and nonprofit organizations. We have experience about mobility as a service, changing behavior and analyzing data. We love to do our work in co-creation with citizens, cities, businesses and knowledge institutions. Our focus for the next years is CONNECTING DOTS, CREATING SPACE.

In co-operation with the city of Amsterdam and other partners we developed street e-hubs for citizens. This is a concept where residents can ask to place shared e-bikes, e-cargo's or e-cars in their street. The government facilitates this process as a step to make the city more liveable. The next step is to develop e-hubs in parking garages, where shared bikes will accommodate the visitors and residents for the last mile of their journey's into the city.

Would you like to know more? You can check out the website (only in Dutch), or you can give Helma a call on 0031-6-20351769 (Dutch and English) or Maranca 0033-6-83641592 (French and German).

An email to Helma@countandcreate.eu is also welcome!

www.fietscoalitiesmartcity.nl/count-en-create

CONNECTING DOTS
CREATING SPACE



EBUSCO

EBUSCO® is a Dutch company that focuses primarily on the development, marketing and sales of fully electric buses for the European market. Existing bus designs are adapted to European rules and legislation and are equipped with monitoring systems that European concessionaires require in order to be able to deliver an optimally safe and economical public transport. EBUSCO® is a pioneer in the field of electric bus transport and was the first European manufacturer to receive a European type approval for electric buses.

Since 2010, EBUSCO® has gained extensive practical experience through and with the deployment of more than 300 buses, which run in a normal timetable (325 km per day). With the introduction and deployment of all-electric buses from EBUSCO®, the EU's emissions targets for public, freight and passenger transport are being met in an urban environment for the next 50 years.

www.ebusco.eu

EBUSCO®

Eco-Movement

Eco-Movement is an independent provider of charge point location data. We specialise in the aggregation, verification, correction and enriching of dynamic charge point data.

We have been building our service since 2012 and our clients are leading navigation service providers in Europe like TomTom, HERE and multiple eMobility companies.

Our goal is to ensure that EV drivers have access to clean and realtime information whenever they are looking for charge points - thereby reducing range anxiety.

We vigorously scrutinize all incoming data from CPO's, perform numerous quality checks and enrich the data with vital classifications concerning accessibility (private/semi-public/public) and more. Doing so, we have found that typically we are able to improve up to 20% of the charge point information that we receive. This is why leading navigation and e-mobility companies choose to use our data for their services.

Please check the latest info on www.eco-movement.com or contact us via info@eco-movement.com

www.eco-movement.com

The logo for Eco-Movement, with "eco" in blue, "mo" in grey, a blue right-pointing chevron, and "ement" in grey.

ElaadNL

ElaadNL is the knowledge and innovation centre in the field of Smart Charging infrastructure in the Netherlands and is an initiative of the Dutch grid operators.

The emergence of electric mobility and sustainable charging is a significant development for the electricity grid. Through their mutual involvement via ElaadNL, the grid operators acquire an overview of the measures to be taken to ensure that the network remains reliable and affordable, whilst enabling the development of E-mobility. Innovative solutions are explored that will generate great benefits for society. Optimal use can be made of the existing grid by 'smart charging'.

www.elaad.nl



EMEurope

The ERA-NET COFUND Electric Mobility Europe (EMEurope) was brought to life in 2016. It is co-funded by the European Commission (EC), supported by the European Green Vehicle Initiative Association (EGVIA), and funding organisations from 14 countries and 2 regions with a strong interest in electric mobility. This initiative is designed to take transnational e-mobility research and policy exchange towards deployable solutions. In order to achieve these goals EMEurope employs a dual strategy through a co-funded call for proposals and cooperation on policy level.

Call 2016: selected projects

EMEurope is funding 13 research and innovation (R&I) projects focussing on the application and implementation of e-mobility with a volume of around 18 million EUR. The aim is to mainstream the electrification of mobility above all in European urban and suburban areas addressing the following key areas of electric mobility:

1. System integration (transport, [sub]urban areas)
2. Urban freight and city logistics
3. Smart mobility concepts and ICT applications
4. Public transport
5. Consumer behaviour and societal trends

Over 115 organizations from public and private sector from 14 countries are involved in the implementation of these R&I projects, encompassing higher education institutions, private large companies, private SMEs, private non-profit research organizations, public organizations, and public research organizations. More information about the projects: www.electricmobilityeurope.eu/projects

www.electricmobilityeurope.eu



Co-funded by the Horizon 2020
Framework Programme of the European Union

EVConsult B.V.

Our dream is to create an emission-free world

Our enthusiasm for a sustainable world goes hand in hand with our extensive knowledge and experience in the field of electric mobility. We provide companies and government bodies with optimal support in their transition to zero emission mobility.

We offer support formulating strategies and providing project management in the dynamic world of electric mobility. What's more, we orchestrate EV projects and processes from start to finish.

EVConsult has been active in the field of electric mobility since 2008 and our ambitions and experience extend worldwide because energy transition is not linked to particular regions. By operating actively in the EV sector from the start, we have built up the knowledge, network and expertise needed to provide sound, independent consultancy services.

EVConsult invests in scientific research and innovation to accelerate developments in electric mobility. We join forces with multiple universities to conduct pilot projects and offer research programmes. Together with our research partners, we test the latest technological and social innovations in the world of e-mobility. We also serve as a bridge between market and research parties, connecting them within the context of a range of projects focusing on creating future-proof EV solutions.

www.evconsult.nl

FIER Automotive

FIER Automotive & Mobility is a business development company specialized in sustainable and electric mobility. FIER works with companies and (local, national and EU) authorities on stimulating the growth of electric mobility. FIER is active in the development and management of projects, initiation of partnerships/consortia and networks, consulting, realizing public-private finance (national & EU) and defining strategies and policies.

Key knowledge areas are: Stimulating electric vehicle (EV) uptake in fleet; Effectiveness of national EV incentives and policies; Stimulating electric trucks in distribution and inner city freight and; Electric car sharing and Smart and renewable energy based Charging infrastructure; and eMobility-as-a-Service.

Already since 2009, FIER has acquired extensive knowledge and experience via multiple large EU projects on electric mobility, of which examples are: Some EU projects are: I-CVUE.eu (2017), ENEVATE.eu (2014), FREVUE.eu (2017), The Electric Green Last Mile (eGLM.eu), Pro-EME.eu, eMaas.eu. Just one of the many examples of business resulting from these projects, is the international fleet of shared full electric vehicles of the company GoodMoovs.com.

Our team is driven by the believe that through our dedicated work, we can contribute to an accelerated transition:

- From conventional to smart mobility
- From combustion engine to zero emission
- From car ownership to mobility as a service

For more information: FIER (www.fier.net) and GoodMoovs (www.goodmoovs.com)



GreenFlux

We want to make electric driving a worldwide success by making it as easy as possible. Therefore, we support our global EV customers with the smartest charging solutions for transaction management, roaming and smartcharging.

GreenFlux has over 8 years of hands on experience as a technology provider for EV charging infrastructure solutions. We lead the industry with our sophisticated smart charging technology to manage (renewable) energy and capacity per charge station in the charging network and even on electricity grid level. From the very beginning, we have developed open protocols that are now the global standard for interoperability. Hereby, driving the eMobility market towards a sustainable future. GreenFlux is currently active in 15 countries on three continents.

We have developed two products – a white label and cloud-based platform to manage EV charging networks and four modular Smart Controllers that fit in every charge point and turn every charge point into a digital and connected brain.

GreenFlux continuously develops new products and services to empower our customers with the smartest in charging infrastructure solutions, anywhere in the world. Please check the latest info on www.Greenflux.com.

www.greenflux.nl

Heiwegen Consultancy B.V.

Since 1992, Heiwegen Consultancy has been the specialist in the field of HRM services for the automotive industry for all personnel inflow, throughflow and outflow issues.

We demonstrably improve the results of organizations through our services. We do this through expert and result-oriented advice on the right deployment of the right person at the right time.

Our clients are located in all sectors of the automotive business for both passenger cars, LCV, trucks and busses. Important segments with which we collaborate include producers, suppliers, importers, dealer organizations, leasing companies, financing companies, damage repair companies and after-market companies.

Our broad services include recruitment & selection/executive search, interim management, (project) detachment, payrolling and organizational issues. We have our own assessment center, led by professional assessors. An assessment helps both the organization and the employee with the successful development of the required competences.

Heiwegen Consultancy mainly fills middle management vacancies up to management level in function groups such as Managing Board/Management, Marketing and Sales, After Sales and Technology, Operations and Quality Management, Finance and Administration.

People make the difference in organizations. For our clients, long-term business relationships and partnership are our starting points. For candidates, we are an independent and objective advisor in their personal development and finding the right position.

www.heiwegen.nl



H • E • I • W • E • G • E • N
C O N S U L T A N C Y

Last Miles Solutions

Last Mile Solutions is a specialist in the field of charging infrastructure for electric vehicles and smart energy solutions. Services, products and consultancy are offered on European scale.

For CPO's and EMSP's Last Mile Solutions offers a complete white label Cloud back-office system including billing, CRM, Smart-Grid, roaming with other providers, etc...

For Charge point manufacturers they offer a complete range of state-of-the-art charge-point controllers, for AC and DC chargers Type-2/CCS/SHADEMO IEC15118 V2G. The service also includes a 24/7 multilingual helpdesk for end users.

Typical customers of Last Mile Solutions:

- Charge point operators
- E-mobility service providers
- Energy Utilities
- Car-OEM's
- Car-Fleet managers
- Charge-station Manufacturers

Several leading parties are customers of Last Mile Solutions spread over 11 countries in Europe.

www.lastmilesolutions.com

last mile  solutions[®]

Lightwell B.V.

Amsterdam based Lightwell is specialized in development of innovative, sustainable lighting solutions.

With street lighting and EV charging Smart poles we supply solutions for the public and private space. These EV charging smart poles enable EV charging up to 22kW and provide lighting for streets. Furthermore, these smart poles can be extended with (environmental) sensors or telecom equipment.

The LightMotion smart pole is the basic infrastructure which enables both cities and business parks to roll out their 'Smart City' ambitions. EV charging infrastructure integrated in streetlights: the optimal solution for efficient usage of the public and private space. The LightMotion, which holds approval by the Dutch Electricity Grid Owners, supporting Energy Transition.

www.lightmotion.nl | www.lightwell.eu



Mobes

Mobes is a dedicated distributor/importer for the Dutch mobility market. Based in Amsterdam and serving local retailers/dealers across the Netherlands, we are a pioneer distributor of modern mobility from foreign manufacturers around the world.

A company set up by three individuals with a passion for changing the Dutch mobility market. We are a team of innovators and entrepreneurs with one currently serving 10 years experience selling scooters, and the other two in their early 20s and entirely focused on developing a career in the modern mobility business.

We launched the company in 2018 with a goal to bring the latest mobility designs to Dutch millennials and everyone who desires innovative transportation devices to improve their mobility. We understand that over the years, the mobility industry has experienced positive changes, and today we are proud to be able to bring the best products to the marketplace.

As a distributor of various collections, we foster a close relationship with our dealers and partners providing them with the right information, margins, training, supply support etc. We value your partnership with us and take pride in our ability to offer the best possible deals on products, exceptional customers service, and satisfaction at all levels.

www.mobes.nl

mobes
distributor of modern mobility

MRA Elektrisch

Established in 2012, Metropolitan Region Amsterdam Electric (MRA-E) promotes and facilitates electric transport in order to contribute to clean air and climate objectives in the Netherlands.

Around the world, MRA-E is perhaps best known for its extensive and reliable network of public charging points in the provinces of Noord-Holland, Flevoland and Utrecht. Currently the network counts well over 3,500 public charging points. Creating a reliable public charging network is a prerequisite for the success of electric driving. Local governments play a crucial role in establishing this network.

Proven approach

For the 80 local municipalities in the three provinces, MRA-E organises joint tenders for public charging points. Municipalities are eager to participate for various reasons, including achieving economies of scale, promoting innovations and keeping control over the public area. The Dutch government has invited MRA-E to join the National Steering Committee for Loading Infrastructure to share knowledge and experience. The aim: to get a similar regional cooperation off the ground in other parts of the country as well.

And there's more

The MRA-E project bureau acts as a central and readily available source of information and expertise. The bureau successfully supports the introduction of electric taxis, electric car-sharing and electric 'last mile' delivery services in city centres.

MRA-E applies a project-based approach in which both knowledge and costs are shared, to achieve results that are beyond individual reach. The idea is not to wait passively until new technologies are fully developed, but to experiment and learn by doing. Get to know us and be inspired!

www.mra-e.nl



NKL The Netherlands Knowledge Platform for Charging Infrastructure

NKL Nederland

The Netherlands Knowledge Platform for Charging Infrastructure (NKL) is an independent collaboration of organizations that are involved with the public charging of electric vehicles in the Netherlands. It is set up by EV market players, Dutch central and local government, universities and grid operators with the goal to stimulate a positive business case for public charging infrastructure and promote measures for development of a mature market for EV by informing, inspiring and connecting.

OCPI – The open independent roaming protocol for EV

NKL is leading OCPI development at the request of market players. OCPI, the open independent roaming protocol for electric vehicles. OCPI aims to accelerate the market for EV drivers and improve mobility services. The goals are to simplify, standardize and harmonize. OCPI is used worldwide and adopted by many companies and several roaming hubs by using it in a hybrid way for both peer to peer connections and in combination with hubs.

evRoaming4EU

The European project evRoaming4EU facilitates roaming services for charging EV and provide transparent information to consumers about locations and prices in Europe by making use of OCPI protocol. Realising cross-border charging and allow any EV driver to charge at any charging station in the EU.

www.ocpi-protocol.org

www.evroaming4.eu

www.nklnederland.com



The Netherlands **Knowledge Platform**
for Charging Infrastructure

Royal HaskoningDHV

Royal HaskoningDHV has been connecting people for 135 years. Together, through our expertise and passion, we have helped contribute to a better society and improved people's lives with work underpinned by our sustainable values and goals.

We are an independent international engineering and project management consultancy leading the way in sustainable development and innovation.

Our professionals deliver services in the fields of aviation, buildings, energy, industry, infrastructure, maritime, mining, transport, urban and rural development and water.

We focus on delivering added value for our clients while at the same time addressing the challenges that societies are facing. These include the growing world population and the consequences for towns and cities; the demand for clean drinking water, water security and water safety; pressures on traffic and transport; resource availability and demand for energy and waste issues facing industry.

By showing leadership in sustainable development and innovation, together with our clients, we are working to become part of the solution to a more sustainable society now and into the future.

We are driving positive change through innovation and technology, helping clients use resources more efficiently and creating solutions which connect with people to make their lives easier, happier and safer.

www.royalhaskoningdhv.com

Sycada Mobile Solutions

Sycada develops innovative Telematics and IoT technology for enterprises to reduce their CO2 footprint and the cost base of their company fleets simultaneously. In other words, a more sustainable world at lower costs.

We work with (public) transport companies, city distribution and taxi companies, facility and professional services, and a host of other sectors to make their fleets Smarter and Greener.

We save tens of millions liters of fuel each year on behalf of our customers. We do this by speeding up the transition to zero emission vehicles, by facilitating sharing of (electric) vehicles, and by helping drivers become safer and more energy efficient in the way they drive.

Sycada facilitates the transition to zero-emission fleets by providing real-time insight to vehicle, battery and charging point data. Apart from live tracking of vehicle status and charging cycles we offer software modules for dynamic planning and for monitoring the state-of-health of batteries.

Visit our website for more information.

www.sycada.com

TNO Automotive

Efficient mobility and logistics are vital to the prosperity and well-being of society. The great challenge today is to manage the ever-growing number of movements of people and goods. TNO's ambition is to help create liveable, sustainable cities through clean, safe, reliable and affordable mobility and logistics.

TNO offers multi-level solutions for the design, deployment and operation of clean drive systems for vehicles. TNO is working on solutions that will enable the transition from the use of fossil fuels to sustainable fuels for long-distance and heavy transport and to electrical energy for regional and urban transport. In addition to a sharp reduction in CO₂ emissions, these solutions also meet local air quality and noise requirements.

TNO is developing solutions via the following four programme lines:

Electrified Powertrain Solutions: Battery Management (State, Charge, Thermal) and Predictive Energy Management, optimization of WTW and TTW emissions, minimize the TCO by efficient use of the stored energy.

Hydrogen Fuel Cells Solutions: Algorithms for state-of-health and state-of-function estimation of the H₂ Fuel Cell, model-based calibration and validation of the best possible Fuel-Cell – Battery combination for a specific use case, providing a robust, efficient and reliable powertrain with the lowest possible TCO.

Flex-Fuel Combustion Technology: Controlled combustion of mixed diesel, natural gas and other future sustainable fuels using our RCCI methodology, enabling >50% brake thermal efficiency, low greenhouse gas emissions and engine-out NO_x and PM emissions.

Powertrain Performance Assessment Centr: Cost-efficient real-world performance assessment and validation methodologies for sustainable energy technologies and/or deployment of hybrid technologies for light- and heavy duty vehicles, to maximize the sustainable performance of vehicles.

www.tno.nl

TNO

TSG Group

TSG Group (Total Support Group) is an engineering agency based in Eindhoven, The Netherlands. We combine technical and creative skills, knowhow of production, and industrialization to design and develop smart and efficient solutions for our customers, such as new products, tools, production machines and (robotic) automation.

Projects include (proof-of-)concept, industrial & UX design, engineering and analyses up to prototyping, pilot series production and industrialization.

We are active in the following markets:

- Mobility
- High Tech Systems & Materials
- Sport & Leisure, Life Science & Health
- AgroFood
- Lighting
- Consumer

www.tsggroup.nl



TOTAL SUPPORT

Vattenfall

At Vattenfall we are working together with customers, partners, authorities and cities to become free from fossil fuels within one generation. We are committed to electrifying society as a way to help turn the tide on climate change. Electrification will be a key enabler for reducing CO2 emissions for businesses, industries, customers and society at large, enabling fossil fuels to be replaced by renewable and climate neutral energy. Transportation accounts for roughly one third of the world's energy consumption. This makes the transportation sector central to the realisation of a more sustainable energy system.

Vattenfall expects that e-mobility will play a key role in solving many of the challenges we face today with regards to energy use and urbanisation. An easily accessible charging infrastructure is a prerequisite for the transition to electric vehicles.

Vattenfall develops and offers charging solutions for electric cars, buses and trucks. Together with our partners we have built one of Europe's largest charging networks, In-Charge, in Sweden, Germany, the Netherlands, Norway and the UK, with further markets to be added. Vattenfall is also taking part in initiatives, including the eRoadArlanda pilot project in Sweden, to develop e-roads for electric trucks and other electric vehicles.

www.nuon.nl/vattenfall/

VDL Bus & Coach

The core activities of VDL Bus & Coach consist of the development, manufacturing, sales and after-sales of a wide range of buses, coaches and chassis modules, the conversion or extension of mini & midi buses and the purchase and sales of second-hand buses. Manufacturing takes place in the Netherlands and Belgium. VDL Bus & Coach places high value on quality, safety, durability, the environment, low fuel consumption, comfort and low maintenance costs.

Sales of VDL Bus & Coach products take place through a worldwide network consisting of corporate-owned sales offices, importers and agents in more than 30 countries. This makes it possible to offer custom-made transport solutions. For after-sales and maintenance, the client can count on rapid, hassle-free assistance from VDL Bus & Coach employees in any of the many service locations. An extensive distribution network ensures that spare parts and accessories are delivered to the requested destination as quickly as possible. VDL Bus & Coach is one of the largest bus producers in Europe.

www.vdlbuscoach.com



BUS & COACH

WaterstofNet

Together with industry and governmental authorities, WaterstofNet develops and realises sustainable hydrogen projects and roadmaps to enable zero-emission transport and energy storage. Its central focus is on Flanders (Belgium) and The Netherlands.

CORE TASKS

- develops and realises sustainable hydrogen projects;
- creates road maps for hydrogen infrastructure and applications;
- develops and coordinates industrial ecosystems for hydrogen, such as the Power to Gas corporate cluster
- is a part of international hydrogen development networks (IEA, Hydrogen Europe, etc.)

In addition, WaterstofNet

- facilitates cooperation between industry, policy, research and education;
- communicates with policymakers, stakeholders and the broader public about hydrogen
- is a partner in European projects on hydrogen, such as H2Benelux (8 refueling stations in BeNeLux area), H2-Share (heavy duty truck + mobile refueling station), Life 'N GrabHy (2 refuse vehicles in 10 EU cities), REVIVE (15 refuse vehicles), HydrogenRegion2.0 (44 ton truck, refueling stations), HighVLOcity, 3Emotion, H2ME etc;
- works together with other European hydrogen regions (Bolzano, Cologne, etc.), and
- is founder and coordinator of the regional 'Power-to-gas' cluster with almost 40 companies who collaborate actively in the field of power-to-gas, through development and realisation of demonstration projects.

H2-Share: demonstration of 27 ton heavy duty truck

WaterstofNet coordinates the European project H2-Share in cooperation with some 15 partners. H2-Share aims to build and demonstrate a 27 ton rigid truck fuelled by hydrogen with a mobile H2 refueler. The project receives €1.69 million subsidies from Interreg North-West Europe (more info: www.nweurope.eu/h2share)

www.waterstofnet.eu/en



