

# ZCI Good Practices Register

*Interregional Learning  
Exchange of experiences dedicated to the identification and  
analysis of good practices*

*Responsible partner: Erasmus UPT (EUR)*

DRAFT  
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## INTRODUCTION

ZCI aims at strengthening the role of 8 Public Authorities to accelerate the provision of zero carbon infrastructure by increasing their capacity and provide capacity-building support for others. Interregional Learning (or Exchange of Experience) will be the main tool used by partners to achieve the project's main aim.

The aim of the Interregional Learning part of the programme is to help partners to achieve the overall objective through the exchange of experience, generation of new knowledge and the transfer of good practices. An important part of this work will be done by Good Practice Register, i.e. partners will learn about the good practices that others have carried out.

## WHAT IS A “GOOD PRACTICE”?

There is no official definition of Good Practice. For ZCI, a good practice is “a project or a process that merits being transferred” in the field of zero carbon infrastructure; it is defined by the observer rather than the owner, and it is subjective (by contrast, a BEST practice is defined against objective criteria). But this creates a logical confusion: how does an observer know what is available? The answer is a Register, from which partners can make their selection.

This draft of good practices register will be used first for discussing PPs' learning needs, and later for planning the study visits. Each partner will find one or more good practice where they can learn and experience.

It will also be used to fulfil the project's commitment to the Programme. ZCI has committed to uploading good practices onto the IE Platform's database of good practices. We will select these from our internal register.

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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	1. Electric bus terminal with chargers
<b>Location</b> <i>name the city, region, state</i>	Växjö, Kronoberg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	From December 2023, all buses in Växjö city traffic will be electric buses. A new electric bus terminal is built Växjö that ensures that the 60 buses will be able to be charged every night.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	This practice gives information about: <ul style="list-style-type: none"><li>• Challenges with very large need for electricity and infrastructure for the net</li><li>• Emission-free transport in the city and lower noise</li><li>• The political (decision makers) process of why Växjö is doing this</li><li>• Procurement of buses</li></ul>
<b>Website</b> <i>If available</i>	



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	2. Two different webbased data systems for infrastructure in Sweden – one from the Region Kronoberg (ReDriv) and from the County Board (Kalmar GIS)
<b>Location</b> <i>name the city, region, state</i>	Online
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	<ul style="list-style-type: none"> <li>• Visual solution of infrastructure for zero-emission vehicles looks like in Kronoberg</li> <li>• To this model the Region Kronoberg has added other stakeholders as fleet owners and fuel producers/vendors</li> <li>• The main challenge is to decide who will maintain the system and keep it current</li> </ul>
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	<ul style="list-style-type: none"> <li>• One example about how to visualise infrastructure</li> <li>• Benchmarking with other similar systems</li> </ul>
<b>Website</b> <i>If available</i>	County Board: <a href="https://ext-geoportal.lansstyrelsen.se/arcgis/apps/MapSeries/index.html?appid=cb67254fc19643c4a304e32ae46a3f11">https://ext-geoportal.lansstyrelsen.se/arcgis/apps/MapSeries/index.html?appid=cb67254fc19643c4a304e32ae46a3f11</a> Region Kronoberg – will be ready during 2023



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	<b>3. Production of biogas and filling station for biogas</b>
<b>Location</b> <i>name the city, region, state</i>	Alvesta, Kronoberg (local farmers are owners)
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	<p>The plant is jointly owned by 11 farmers and Växjö Stift's Property Committee. Annually, about 50,000 tons of substrate are digested, which produces about 1,500,000 kg of methane, which corresponds to roughly 2 million litres of gasoline.</p> <p>The fully digested manure is transported on return loads back to the farms to be used as high-quality and almost odorless fertilizer for the farms' fields.</p>
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	To show how gas for vehicles can be locally produced. In this way you will be less dependent of import of gas from abroad.
<b>Website</b> <i>If available</i>	<a href="https://www.alvestabiogas.se/">https://www.alvestabiogas.se/</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	4. Production of biogas
<b>Location</b> <i>name the city, region, state</i>	Växjö, Kronoberg (municipality is owner)
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The facility treats wastewater from city and surrounding urban areas. The facility is a sewage treatment plant with co-digestion of external substrate. At this plant vehicle gas is made from sewage sludge, food waste from households, restaurants and commercial kitchens, and grease from restaurants.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	To show how gas for vehicles can be locally produced of the waste from municipalities processes. In this way you will be less dependent of import of gas from abroad.
<b>Website</b> <i>If available</i>	<a href="https://www.vaxjo.se/sidor/bygga-och-bo/vatten-och-avlopp/slam-och-biogas.html">https://www.vaxjo.se/sidor/bygga-och-bo/vatten-och-avlopp/slam-och-biogas.html</a>





<b>GOOD PRACTICE</b> <i>Please provide a title</i>	5. Filling station for liquid biogas
<b>Location</b> <i>name the city, region, state</i>	Ljungby, Kronoberg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Station offers liquefied natural gas (LNG) and liquefied biogas (LBG) for heavy vehicles. The station is located in a logistics hub, which means that there is already a large existing customer base in the area, intersection between E4 and national highway 25.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	According to the new emission targets that the EU introduced in 2019, emissions of greenhouse gases from heavy vehicles must be reduced by 30 percent until 2030. The need to reduce greenhouse gas emissions quickly makes liquefied gas a good solution because it meets the requirements for reduced emissions.
<b>Website</b> <i>If available</i>	<a href="http://Tankstationer.med.gas(gasum.com)">Tankstationer med gas (gasum.com)</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	6. Production and filling station for hydrogen gas
<b>Location</b> <i>name the city, region, state</i>	Ljungby, Kronoberg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Ljungby: During the production of hydrogen, residual heat is formed, which Ljungby municipality uses to supply building with district heating.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Cooperation between municipality and companies. Business model that gains value for different partners.
<b>Website</b> <i>If available</i>	<a href="https://www.ljungby.se/sv/alla-nyheter/arkiverade/satsning-pa-gron-vatgas/">https://www.ljungby.se/sv/alla-nyheter/arkiverade/satsning-pa-gron-vatgas/</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	7. Production and filling station for hydrogen gas
<b>Location</b> <i>name the city, region, state</i>	Älgult, Kronoberg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	One of the first filling stations for hydrogen gas in Sweden. The hydrogen is to be manufactured and produced with electricity from a nearby wind turbine in Hageskruv.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Cooperation between municipality and companies. Business model that gains value for different partners.
<b>Website</b> <i>If available</i>	<a href="http://www.Uppvidinge.se">www.Uppvidinge.se</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	8. Filling station for E85 (ethanol) and HVO100
<b>Location</b> <i>name the city, region, state</i>	Many of the petrol stations in Kronoberg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	E85 and HVO100 are well distributed in Sweden
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	To see which requirements must be met to be able to sell HVO and ethanol at petrol stations
<b>Website</b> <i>If available</i>	



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	9. Conversion of vehicles to biogas
<b>Location</b> <i>name the city, region, state</i>	Växjö, Kronoberg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Conversion of most cars from different car manufacturers to gas drive
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	To see how business case looks like
<b>Website</b> <i>If available</i>	<a href="https://www.konvegas.com/">https://www.konvegas.com/</a> <a href="http://www.maskincentrum-bockara.se/kontakt-maskincentrum/">www.maskincentrum-bockara.se/kontakt-maskincentrum/</a>



<p><b>GOOD PRACTICE</b> <i>Please provide a title</i></p>	<p>10. Charger for heavy vehicles</p>
<p><b>Location</b> <i>name the city, region, state</i></p>	<p>Along the E4, Kronoberg</p>
<p><b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i></p>	<p>National Energy Agency supported financially the expansion of charging stations for heavy goods traffic to be carried out as quickly as possible</p>
<p><b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i></p>	<p>To see how financial models can influence development of infrastructure</p>
<p><b>Website</b> <i>If available</i></p>	



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	11. Portable hydrogen gas stations (to be finalised during 2023)
<b>Location</b> <i>name the city, region, state</i>	Älghult, Kronoberg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Portable stations for hydrogen that enable more people to choose an emission-free fuel.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Implementation in forest industry
<b>Website</b> <i>If available</i>	Not finalised yet



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	12. Klimatklivet - Climate Leap Initiative (local climate investments)
<b>Location</b> <i>name the city, region, state</i>	Online
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Financing of solutions for different tools in infrastructure
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Result from a governmental initiative that started couple years ago, developed and financially supported both private individuals and companies
<b>Website</b> <i>If available</i>	<a href="https://www.naturvardsverket.se/arnesomraden/klimatomstallningen/klimatklivet">https://www.naturvardsverket.se/arnesomraden/klimatomstallningen/klimatklivet</a>





<b>GOOD PRACTICE</b> <i>Please provide a title</i>	13. Load the countryside – business models
<b>Location</b> <i>name the city, region, state</i>	Kronoberg, district of glass production
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Collaboration between different actors at countryside around the development and operation of renewable fuel infrastructure
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Three business models developed <ul style="list-style-type: none"><li>• Focus on supporting business sectors and non-profit sector as charging station owner</li><li>• Focus on the municipality as facilitator and owner of charging station at travel stations and/or commuter parking</li><li>• Focus on the municipality as facilitator and owner of charging station in connection to publicly owned business</li></ul>
<b>Website</b> <i>If available</i>	



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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	14. Biogas Reactor
<b>Location</b> <i>name the city, region, state</i>	Puolanka, Kainuu, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	This investment was implemented in 2022 under the EU funded project (Karelia CBC) as part of larger Biocenter project. The biogas plant operated by Honkainfra Oy and supplied by Doranova Oy is to process sewage sludge from Puolanka and nearby municipalities and use it to generate electricity for the sewage plant's electricity and heating needs. The next step is to use the gas in the municipality's district heating production.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Puolanka aims to reduce the municipality's greenhouse gas emissions by 80% by 2030. In addition to biogas, the Biocenter project develops wood burning. A wood-drying field of nearly five hectares is being built in connection with the heating plant so that wood does not have to be temporarily stored around the countryside. Shorter waste transport journeys and less wood truck traffic will bring significant economic and environmental savings.
<b>Website</b> <i>If available</i>	<a href="#">Puolanka biogas reactor opening ceremony on 30th of November 2022   Karelia CBC</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	15. Advanced metering infrastructure
<b>Location</b> <i>name the city, region, state</i>	Kainuu, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Electricity distributor Kajave decided to employ Landis+Gyrs Datahub connector service to transfer electricity consumption data into the centralized information exchange system. Smart meters and supporting systems will enable customers to improve their own energy efficiency and thus contribute to the transition to more green energy system.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	With the implementation of the Datahub, information for each location, such as the customer or consumption data from both the network service company's and the electricity vendor's systems are made instantaneously accessible to the authorized parties. This would significantly speed up, simplify, and improve processes for all parties, from grid operators to consumers.
<b>Website</b> <i>If available</i>	<a href="http://landisgyr.com">Kajave to integrate with Finnish national Datahub (landisgyr.com)</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	16. Engine pre-heating infrastructure
<b>Location</b> <i>name the city, region, state</i>	Kainuu, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Capacity and stability of the existing three-phase electric networks in Finland is sufficient for smart car charging. Cold climate conditions are taken into account as many cars are equipped with a pre-heater and electric pre-heating infrastructure is built largely in Finland.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Electric network is ready for EV charging in households. Smart charging points both in multi-storey and private houses could be installed without big additional investments for example by utilising the existing engine pre-heating systems.
<b>Website</b> <i>If available</i>	<a href="#">OPAS: Sähköauton latauspiste taloyhtiöön - kaikki mitä tulee tietää, kun suunnittelet latauspisteiden hankkimista - Latausasemaopas</a> (FIN)



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	17. Charging infrastructure for electric snowmobiles
<b>Location</b> <i>name the city, region, state</i>	Lapland, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The number of electric snowmobiles is expected to grow in winter tourism areas. The event service company Lapland Safaris will introduce long-awaited environmentally friendly electric snowmobiles on their trails in Rovaniemi and Luosto in Finland next winter.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	Winter conditions could be challenging for EVs, including electric snowmobiles especially in the sparsely populated areas due to low electric network coverage and capacity needed for fast charging. One solution could be Plugit Hube developed by Plugit Finland.
<b>Website</b> <i>If available</i>	<a href="#">Plugit ja BRP kehittivät latausratkaisun sähkömoottorikelkoille - Plugit Finland</a> (In Finnish only)



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	18. Liquefied Biogas (LBG)
<b>Location</b> <i>name the city, region, state</i>	Vieremä, North Savo, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The project aims to create a biogas ecosystem in Vieremä. In practice, the introduction of biogas will increase security of supply, replace the use of heavy fuel oil in backup power production and allow industry in Vieremä to switch from using fossil gas to using biogas.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	The project will make biogas available as an alternative vehicle fuel for local residents and businesses. The project also means that the municipality of Vieremä will switch to using biogas-fuelled vehicles in its own operations and in outsourced services.
<b>Website</b> <i>If available</i>	<a href="#">Gasum to supply liquefied biogas to the Vieremä biogas terminal</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	19. Electrification of public transport
<b>Location</b> <i>name the city, region, state</i>	Oulu, Northern Ostrobothnia, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Under the new agreement, the Nordic region's biggest public transport operator Nobina will operate 34 electric buses on behalf of Oulu Regional Transport and further develop public transport throughout this city.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	This investment is in line with the ZCI project's goals and the EU directive to accelerate the green transition and make the public transport carbon neutral by 2025 (41% of the fleet should be clean).
<b>Website</b> <i>If available</i>	<a href="https://intelligenttransport.com">Nobina to develop city transport in Oulu, Finland from June 2024 (intelligenttransport.com)</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	20. Circular Economy Area in Riikinneva
<b>Location</b> <i>name the city, region, state</i>	Leppävirta, North Savo, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	There is significant potential for biogas production in the Riikineva area. The biogas plant could produce at least 50 gigawatt-hours of renewable liquefied biogas per year, which corresponds to approximately five million litres of diesel. The biogas plant would process biowaste separated from the local waste incineration plant and agricultural side streams in the area.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	In addition to the study of the biogas plant, the companies, involved in the project, will launch a study on whether the flue gases of the waste incineration could be used to produce synthetic methane to be utilised in transport and industry in the same way as natural gas and biogas.
<b>Website</b> <i>If available</i>	<a href="#">Riikinneva - Kierron kautta kestävään kasvuun</a> (in Finnish only)





<b>GOOD PRACTICE</b> <i>Please provide a title</i>	21. Manual for the development of the distribution network of alternative energy
<b>Location</b> <i>name the city, region, state</i>	South Karelia, Finland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The manual is a concrete tool to support the establishment of recharging and refueling infrastructure in municipalities.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and</u> how it's related to ZCI</i>	The purpose of the manual is to clarify and harmonise the activities of municipalities, to speed up the establishment process and to fill the information gaps identified during the first work package.
<b>Website</b> <i>If available</i>	<a href="http://PowerPoint-esitys(ekarjala.fi)">PowerPoint-esitys (ekarjala.fi)</a> (in Finnish only)



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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	22. Setting up 43 domicile charging stations and 15 AC
<b>Location</b> <i>name the city, region, state</i>	City Municipality Kranj (CMK), Gorenjska region, Slovenia
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	CMK is transitioning their public fleet of fossil fuel vehicles to electric, reducing the number of cars by creating the municipal (internal) car-sharing system, including public companies, institutes, schools. For this reason, they've set up 43 domicile charging points for internal use and 15 AC public charging points.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i>	Municipality taking the initiative. Going electric, optimising the total number of publicly owned vehicles, taking cars on a rental term, setting up a charging point network, no CAPEX for the municipality, public-private partnership, electricity generated from solar panels.
<b>Website</b> <i>If available</i>	An article, before the project was realised: <a href="https://www.zurnal24.si/gorenjska/kranjska-obcina-gre-na-elektriko-358049">https://www.zurnal24.si/gorenjska/kranjska-obcina-gre-na-elektriko-358049</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	<b>23. Setting up 8 charging stations for 8 e-buses and an energy storage system</b>
<b>Location</b> <i>name the city, region, state</i>	City Municipality Kranj (CMK), Gorenjska region, Slovenia
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	CMK has started with the planning for e-bus fleet in 2019. This year they've received four out of eight ordered, 12m long e-buses with 5 charging stations from 8 planned. Electricity is provided from solar panels and stored in a battery storage system to mitigate electricity network peaks.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i>	Municipality taking the initiative. Going electric with bus fleet, setting up a charging station bus network, public-private partnership, electricity generated from solar panels, electricity storage system.
<b>Website</b> <i>If available</i>	Articles: <a href="http://e-mobilitygorenjska.si/en/slavnostni-prevzem-elektricnih-avtobusov-v-mestni-obcini-kranj/">http://e-mobilitygorenjska.si/en/slavnostni-prevzem-elektricnih-avtobusov-v-mestni-obcini-kranj/</a>  <a href="https://www-ettransport-si.translate.google.com/translate?sl=sl&amp;tl=en&amp;x_tr_hl=sl&amp;x_tr_pto=wapp">https://www-ettransport-si.translate.google.com/translate?sl=sl&amp;tl=en&amp;x_tr_hl=sl&amp;x_tr_pto=wapp</a>



Partner	Burgas Municipality
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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	24. Green public transport
<b>Location</b> <i>name the city, region, state</i>	Burgas, Bulgaria
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The city of Burgas is providing a 100% green public transport. In the city are moving 56 electric buses. They are charged by 56 charging stations and by the end of September, 20233 1MW PV installation will be completed and will support the charging of electric buses as well a other activities of the public transport company.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Electric charging stations are a must have in order to support the mobility shift in cites. Green energy from PVs further supports the shift to zero carbon infrastructure.
<b>Website</b> <i>If available</i>	n/a



Partner	Mancomunidad de la Comarca de Pamplona (MCP) Servicios de la Comarca de Pamplona, S.A. (SCPSA)
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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	25. Integrated Management Platform for Charging Points "NavarraTeRecarga"
<b>Location</b> <i>name the city, region, state</i>	Comunidad Foral de Navarra
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	"NavarraTeRecarga" is a platform/app for EV charging points management including a visualization map created and financed by the Government of Navarra for its own charging infrastructure management and it is also available for all those Local Entities interested in managing their own CHP.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	This app allows any public entity access to a publicly owned and managed CHP network, facilitating the transition to electric mobility throughout the region and especially in those places where it is not economically feasible for companies in the sector (white zones). It also offers interoperability and payment gateway.
<b>Website</b> <i>If available</i>	<b>App:</b>  <a href="https://navarraterecarga.com/users/sign_in">https://navarraterecarga.com/users/sign_in</a>  <b>Press release:</b>  <a href="https://www.navarra.es/es/-/nota-prensa/desarrollo-economico-lanza-una-aplicacion-con-la-que-entidades-locales-podran-gestionar-sus-puntos-de-recarga-de-vehiculo-electrico">https://www.navarra.es/es/-/nota-prensa/desarrollo-economico-lanza-una-aplicacion-con-la-que-entidades-locales-podran-gestionar-sus-puntos-de-recarga-de-vehiculo-electrico</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	<b>26. Subsidies for repairing and maintenance of bicycles</b>
<b>Location</b> <i>name the city, region, state</i>	Region of Navarra
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The aid, aimed at the general public, is intended to finance bicycle maintenance and repair actions, for a maximum amount of 50 euros per application/bicycle. About 2,000 actions are being financed each year, with an approach focused on daily mobility, and for this purpose a network of bike shops works repairing bikes and managing the aids together with the Administration.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	This subsidy has been convened annually, with the aim of promoting sustainable mobility, due to its benefits in terms of reduction of pollution, noise and use of public space, as well as encouraging physical exercise. In addition, this initiative is aligned with the principles of the circular economy, seeking to extend the life of bicycles and putting those that were broken into use. The final objective of this action is the decarbonisation of the regional transport.
<b>Website</b> <i>If available</i>	<a href="https://reactivatubici.navarra.es/es/">https://reactivatubici.navarra.es/es/</a>  <a href="https://reactivatubici.navarra.es/eu/">https://reactivatubici.navarra.es/eu/</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	27. `Trail Gazers´ trail model web platform (TMWP)
<b>Location</b> <i>name the city, region, state</i>	Pilot for Plazaola walk or bike Greenway.
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	<p>The TMWP is a management and dissemination system for trail related geoinformation that builds up an online model of the trail:</p> <ul style="list-style-type: none"> <li>• Allows mapping a profile with more than 40 layers of information (amenities, services...)</li> <li>• Centralizes incidents and maintenance</li> <li>• Centralizes management: sensors data, KPIs, surveys results (users, residents, stakeholders)</li> <li>• Allows mapping assets, constraints and key future actions</li> </ul>
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	<p>The TMWP will help reducing the likelihood of various problems such as parking congestion and pollution related to fossil fuel based vehicles. This trail management system will encourage hiking and cycling and reduce the use of traditional vehicles.</p>
<b>Website</b> <i>If available</i>	<p><a href="https://www.trailgazers.eu/">https://www.trailgazers.eu/</a></p> <p>This project is focused on the manager's part of the platform (private access), leaving the user access part (public) for future projects.</p>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	28. Shared electric bike service
<b>Location</b> <i>name the city, region, state</i>	Pamplona Municipality
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	<p>The city of Pamplona offers a shared or rental electric bicycle service that includes 42 charging stations and 400 bicycles, which has been very useful in overcoming the barrier that topography implies for the development of cycling mobility. It has been implemented through a tender procedure for a public land administrative concession for the installation, management and operation of the system with public service conditions for daily sustainable mobility.</p>
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	<p>It is estimated that the saving in CO2 emissions due to the implementation of this service reaches more than 500 tons and allows the success of a set of integrated strategies for the promotion of cycling mobility and the decarbonisation of transport in the city of Pamplona.</p>
<b>Website</b> <i>If available</i>	<p><a href="https://www.pamplona.es/alquilerbicielectrica">https://www.pamplona.es/alquilerbicielectrica</a>  <a href="https://rideonpamplona.com/">https://rideonpamplona.com/</a></p> <p><a href="https://www.pamplona.es/actualidad/noticias/las-bicis-del-servicio-de-bicicleta-electrica-compartida-han-cubierto-400">https://www.pamplona.es/actualidad/noticias/las-bicis-del-servicio-de-bicicleta-electrica-compartida-han-cubierto-400</a></p>





<p><b>GOOD PRACTICE</b> <i>Please provide a title</i></p>	<p>29. Climate Change and Energy Strategy 2030 → Climate Neutrality 2030. Plan for the introduction of less polluting energies in public transport.</p>
<p><b>Location</b> <i>name the city, region, state</i></p>	<p>Pamplona County, Navarra, Spain.</p>
<p><b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i></p>	<p>Renewal of the fleet to Carbon Neutral Buses.</p> <ul style="list-style-type: none"> <li>• Approximately 2/3 of the total fleet, will be CNG propulsion with Guarantee of Renewable Origin (GoO).</li> <li>• The renewal of the rest of the fleet (1/3) will be carried out using 100% Electric buses with a Guarantee of Renewable Origin (GoO).</li> <li>• Innovation projects with new technologies</li> </ul>
<p><b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i></p>	<p>There is a clear Climate Neutrality strategy and objective. Real experience of implementing first steps:</p> <ul style="list-style-type: none"> <li>• One line completely electrified with chargers in the way (6 buses).</li> <li>• New electrical buses with chargers in garage (20 buses).</li> <li>• CGN buses with GdO (19 buses).</li> <li>• Develop our own biomethane generation from wastewater and municipal waste treatment.</li> </ul>
<p><b>Website</b> <i>If available</i></p>	<p><a href="https://recursos-prod.mcp.es/transparencia/planificacion-estadistica/X_Plan_TUC_2023_cast.pdf">https://recursos-prod.mcp.es/transparencia/planificacion-estadistica/X_Plan_TUC_2023_cast.pdf</a></p>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	30. Electric bus line 9-Pantogaphos (1st complete national electric urban transport line).
<b>Location</b> <i>name the city, region, state</i>	Pamplona County, Navarra, Spain.
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Complete electrification of line 9 with 6 electric buses with chargers installed at 2 stops. These chargers use a fast charge of 300 kW of electrical power.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and</u> how it's related to ZCI</i>	Good example of a full electric city bus line in operation for the last three years.
<b>Website</b> <i>If available</i>	<a href="https://recursos-prod.mcp.es/transparencia/planificacion-estadistica/X_Plan_TUC_2023_cast.pdf">https://recursos-prod.mcp.es/transparencia/planificacion-estadistica/X_Plan_TUC_2023_cast.pdf</a>



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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	31. Transport & Mobility Forum Cork
<b>Location</b> <i>name the city, region, state</i>	Cork
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	<p>Cork Transport and Mobility Forum is a collective of local stakeholders, who address issues relating to sustainable and active travel. The CTMF promotes sustainable transport measures and policies by:</p> <ul style="list-style-type: none"> <li>• Supporting improved active travel infrastructure and public transport services;</li> <li>• Assessing planning applications;</li> <li>• Changing the culture in favour of sustainable and active travel;</li> <li>• Arranging promotional events.</li> </ul>
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	<p>CTMF is a good example of stakeholder engagement. It brings local authorities, public-transport providers, cycling and environmental associations, large employers, higher-education institutes, hospitals, etc. together to discuss and advocate for sustainable transport modes. CTMF is a partner in Embracer, which aims to integrate public transport with travel modes such as cycling, and car/bike/scooter sharing. <a href="https://www.interregeurope.eu/embracer">https://www.interregeurope.eu/embracer</a></p>
<b>Website</b> <i>If available</i>	<a href="https://www.transportandmobilityforum.com">https://www.transportandmobilityforum.com</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	32. Cork Bike Week
<b>Location</b> <i>name the city, region, state</i>	Cork City
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Supported by Cork City Council, community groups, organisations, clubs, schools, workplaces and disability services promote and support active travel with over 150 free events in a programme designed to encourage cyclists of all abilities. Events range from cycling picnics and cultural tours to bike maintenance classes and e-bike trials.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	The week-long programme encourages novice and experienced cyclists to take part in fun, informative cycling events in Cork city. Bike Week Cork is an ideal forum to showcase the expansion of safer cycling infrastructure in the city. It's designed to encourage behaviour change by attracting novice cyclists.
<b>Website</b> <i>If available</i>	<a href="#">Bike Week Cork Events 2023   Cork Sports Partnership</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	33. Cork City Council's EV-Fleet
<b>Location</b> <i>name the city, region, state</i>	Cork City
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Cork City Council took the lead nationally in 2020 by replacing 76 diesel vehicles with electric vehicles (EVs), creating the biggest local authority EV-fleet in the country. The cars and vans are driven by staff who deliver outdoor services. Two of the cars are used as 'pooled vehicles' for use by City Hall-based officials.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Cork City Council's decision to go electric demonstrates the Council's commitment to promoting zero-carbon infrastructure and has been used to encourage other local, private and public-sector organizations to follow. The cost efficiencies have been substantial, but the opportunity for staff to experience EVs has also been significant in promoting the switch from fossil-fuelled vehicles.
<b>Website</b> <i>If available</i>	<a href="#">Electric Vehicle Fleet - Cork City Council</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	34. Cork School Cycle Bus
<b>Location</b> <i>name the city, region, state</i>	Cork City
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	A parent-led initiative that encourages and supports safe and sustainable travel. The group initially started with safer walking routes to school and then expanded to making a safe street and finally cycle bus. From a central location, children cycle together as a group to school under the supervision of the parents.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	This is a great example of a bottom-up, community initiative that can scaled up to include schools throughout the city. If ZCI initiatives are to be successful and long lasting, they'll need buy-in from locals.
<b>Website</b> <i>If available</i>	<a href="https://www.rsa.ie/news-events/news/details/2022/12/13/cycling-campaigner-who-inspired-changes-to-rules-of-the-road-wins-top-rsa-road-safety-award">https://www.rsa.ie/news-events/news/details/2022/12/13/cycling-campaigner-who-inspired-changes-to-rules-of-the-road-wins-top-rsa-road-safety-award</a>



Partner	City of Mechelen
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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	35. State-of-the-art mobility- and energyhub Keerdok
<b>Location</b> <i>name the city, region, state</i>	Mechelen, Belgium
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	ACCESS stands for 'Advancing Communities towards low-Carbon Energy Smart Systems'. Thanks to this Interreg project, the city of Mechelen is taking new steps in its transition towards a climate-neutral city and towards smart and low-carbon energy systems. With the mobility and energy hub in the new city outskirts car park Keerdok, Mechelen is experimenting with smart management of locally produced renewable energy, energy sharing at building level and the application of energy storage via 'vehicle-to-grid'.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i>	<p>The parking building is a paragon of sustainability, with geothermal energy for space heating and a rooftop PV installation of 170 kW peak, equivalent to the power consumption of about 50 Mechelen families. To charge vehicles, 20 smart AC connection points at 11 kW, 4 DC charging points at 200 kW and 2 vehicle-to-grid (V2G)DC charging points have been installed.</p> <p>With V2G, (part of) the energy from the battery of electric share vehicles is returned to other users in the building.</p> <p>Moreover, this project also applies energy sharing between the various 'occupants' of the building according to the recently enforced Flemish regulations on the subject. The PV installation is electrically connected via different share installations to the various building users, namely retail, offices and the charging station operator. The parties in the building share their solar surpluses with each other.</p>
<b>Website</b> <i>If available</i>	<a href="https://leadinglocalenergy.systems/">https://leadinglocalenergy.systems/</a> <a href="https://www.mechelen.be/access">https://www.mechelen.be/access</a> <a href="https://www.ingenium.be/nl/projecten/1013/project-access-parking-keerdok-stad-mechelen">https://www.ingenium.be/nl/projecten/1013/project-access-parking-keerdok-stad-mechelen</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	<b>36. Space-saving charging point solutions for row houses (Archie)</b>
<b>Location</b> <i>name the city, region, state</i>	Mechelen, Belgium
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The Archie is a space-saving charging point for row houses, where we place the charging point against the façade. The charging point then bridges the footpath by air, rather than by a cable across the footpath. This keeps the passage on the footpath free. The appearance is similar to a rainwater pipe. The charge point is connected to a separate meter box in the house.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	<p>The Archie is designed to be shared with other neighbours in the street. Through an application, billing, booking of a charging station and appointment scheduling are done.</p> <p>Thanks to the Archie, you no longer need to check the charging stations in your neighbourhood for availability. By making a reservation, you can be sure of a charging session nearby.</p>
<b>Website</b> <i>If available</i>	<a href="https://www.mechelen.be/project-laadpaal-archie">https://www.mechelen.be/project-laadpaal-archie</a> <a href="https://www.archie.energy/#part6">https://www.archie.energy/#part6</a>





<b>GOOD PRACTICE</b> <i>Please provide a title</i>	<b>37. Roadmap and planning rollout of charging infrastructure in Mechelen</b>
<b>Location</b> <i>name the city, region, state</i>	Mechelen, Belgium
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	EV Consult is the Dutch consulting company helping the Netherlands, Flanders and also Morocco with the mapping of potential locations where there will be a charging need in the future. using this tool, regions or cities can more easily plan the charging infrastructure roll-out and keep a clear overview of the ever-growing number of charging points in their city or region.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	In Flanders, the government sets the frameworks within which municipalities and cities can give their own interpretation to the outlines drawn up for the rollout of charging infrastructure. EV Consult provides an interactive map of charging points (actual & potential) for cities to roll-out, follow-up and manage the public and semi-public charging points in the city.
<b>Website</b> <i>If available</i>	<a href="https://www.evconsult.nl/en/nieuws/evconsult-presenteert-roadmap-uitrol-laadinfrastructuur-in-marokko/">https://www.evconsult.nl/en/nieuws/evconsult-presenteert-roadmap-uitrol-laadinfrastructuur-in-marokko/</a>



Partner	City of Parma
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<b>GOOD PRACTICE</b> <i>Please provide a title</i>	38. Electric Mobility Plan
<b>Location</b> <i>name the city, region, state</i>	Parma
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	In 2019, Parma developed the “Electric Mobility Localization Plan” in order to map the optimal locations for charging points in urban area. The plan allowed so far the installation of 82 charging infrastructures for over 150 quick and fast charging points, with no costs for the Municipality.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	The charging points strategy is the result of an integrated approach which took into consideration a set of complex and articulated factors (electricity network, petrol stations, business model and integration with the other services) as well as interacting consistently with the Integrated National Plan of the Electricity Grid (PNIRE).
<b>Website</b> <i>If available</i>	



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	39. Fast charging points installation
<b>Location</b> <i>name the city, region, state</i>	Parma
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	In order to promote electric mobility, with particular regard to long distances, a new tender for High power recharging infrastructures was issued in 2023. The aim is to provide the urban area with a charging network with widespread public access, efficient and available 24/7, able to meet the rapid increase of electric or plug-hybrid vehicles.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Fast and ultra-fast charging infrastructures need very specific administrative and sites characteristics: Parma wants to guarantee an overall uniform distribution, which also takes into account the needs in terms of traffic volume. Hypercharger and superchargers are able to satisfy different mobility needs of the second electrification phase, in particular for those who need to travel long distances and then recharge in a short time.
<b>Website</b> <i>If available</i>	



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	40. Electric logistics
<b>Location</b> <i>name the city, region, state</i>	Parma
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Parma wants to regulate of logistic activities in an integrated and harmonious way, the management of public spaces and their use, encouraging virtuous behaviors. With this aim the Administration approved a new regulation in order to facilitate the access to less polluting vehicles, linking the access fee to the vehicle category.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	New purchase habits and other factors are completely changing the logistic sector. The increase in the volumes, frequency and capillarity of urban logistics activities and require a coordinated effort by all the stakeholders involved, aimed at minimizing the impact on the urban ecosystem.
<b>Website</b> <i>If available</i>	



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	41. Full electric bus fleet
<b>Location</b> <i>name the city, region, state</i>	Parma
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The Municipality of Parma, together with the public transport operator TEP Spa, is making huge investments to have a fossil free bus fleet. Regarding electric buses, Parma has a trolleybus network on the main lines of the city. At the end of 2023, the trolleybus project will bring a first tranche of new 12 electric buses to Parma and, subsequently, another 15.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	A decisive step forward for electric and low environmental impact mobility in Parma and its province which, to date, have made it possible to reduce the emissions of fine particles emitted by company buses by 70%. The development plan for the next few years for more sustainable public mobility takes off, thanks also to the evolution of technologies available on the market.
<b>Website</b> <i>If available</i>	



## GOOD PRACTICES FROM OUTSIDE THE PARTNERSHIP

## PROPOSED BY GORENJSKA

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	42. e-Charging payment with POS terminals, Mechelen, Belgium
<b>Location</b> <i>name the city, region, state</i>	Mechelen, Belgium
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	A parking garage Keerdok, with 528 parking spaces and charging infrastructure set up. The payment is enabled on a wall "box" with a POS terminal. Everything is managed on a display, one chooses a preferred spend amount of money on a charge regarding the energy required, a payment card, whether a debit or a credit.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	No need for downloading an APP, giving away your e-mail address, or other data, no need for RFID cards, or signing contracts with the charging points operators, or deciding for subscription packages. Cheaper, excludes the costs of the eMobility Service Provider network or other systems via eRoaming. That would make travel through EU easier.
<b>Website</b> <i>If available</i>	<a href="http://e-mobilitygorenjska.si/en/no-app-downloading-for-ad-hoc-payments-needed-payment-by-payment-card-for-charging-electric-personal-vehicles-on-public-charging-stations-possible-in-mechelen-belgium/">http://e-mobilitygorenjska.si/en/no-app-downloading-for-ad-hoc-payments-needed-payment-by-payment-card-for-charging-electric-personal-vehicles-on-public-charging-stations-possible-in-mechelen-belgium/</a>

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	43. e-BUSES, Burgas, Bulgaria
<b>Location</b> <i>name the city, region, state</i>	Burgas, Bulgaria
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	According to Irizar, the vehicles are 34 battery-electric solo buses and ten articulated buses. The twelve-metre long have 26 seats and a wheelchair area. Batteries of up to 350 kWh can be installed here, and various charging options possible ranging from 100 kW to 450 kW. A maximum output of 180 kW.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	Probably could be any other similar practice where the fossil fuel bus fleet went electric. The interesting part is going electric with bigger fleet, probably covering large distances and establishing charging infrastructure, since Slovenia is lagging behind in this area.
<b>Website</b> <i>If available</i>	<a href="http://e-mobilitygorenjska.si/en/no-app-downloading-for-ad-hoc-payments-needed-payment-by-payment-card-for-charging-electric-personal-vehicles-on-public-charging-stations-possible-in-mechelen-belgium/">http://e-mobilitygorenjska.si/en/no-app-downloading-for-ad-hoc-payments-needed-payment-by-payment-card-for-charging-electric-personal-vehicles-on-public-charging-stations-possible-in-mechelen-belgium/</a>



## PROPOSED BY CORK

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	44. Cargo-Bike Loan Scheme
<b>Location</b> <i>name the city, region, state</i>	Scotland
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Cargo Bike Scotland offers an e-cargo-bike loan scheme, including two- and three-wheeled cargo bikes and trailers. Local authorities, public and third sector organisations across Scotland can also pilot their own loan schemes using the CBS bikes for uses such as delivering goods, the school run, shopping and supporting business operations.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	The Cargo Bike Scotland project facilitates knowledge sharing and acts as a point of contact for anyone considering using cargo bikes in Scotland. It is a more advanced version of a Cork City Council pilot scheme to promote cargo-bike use amongst public and commercial sectors.
<b>Website</b> <i>If available</i>	<a href="https://www.sustrans.org.uk/cargo-bike-scotland">Cargo Bike Scotland project - Sustrans.org.uk</a>

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	45. EV Car Club Pilot
<b>Location</b> <i>name the city, region, state</i>	Oxfordshire, UK
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	The City and District Councils of Oxfordshire are working with commercial car clubs to run a pilot of shared electric vehicles across the county. These EV cars (with a range of 150-250 miles) are available for residents to use on a pay-per-use basis for as little as an hour and up to a few days.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	As part of ZCI, Cork City Council is interested in investigating all options for more sustainable means of travelling in the city. The Oxfordshire pilot study, which ends April 2024, is aimed at those who don't need or want to own a car but have occasional need to drive. It may, therefore, be ideal for urban dwellers.
<b>Website</b> <i>If available</i>	<a href="https://www.oxfordshire.gov.uk/electric-vehicle-ev-car-club-pilot">Electric vehicle (EV) car club pilot   Oxfordshire County Council</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	46. Future-proofed Carpark at Eandis-Keerdok
<b>Location</b> <i>name the city, region, state</i>	Mechelen
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	A multi-functional high-rise car park with 528 spaces, incorporating a mobility hub, and office and retail space. The pilot scheme has 26 charging points, e-bike charging lockers, and provides for a shared-car scheme. The building was designed to optimise renewable energy, and solar panels provide power that is shared between the charging points and office and retail spaces.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how it's related to ZCI</u></i>	We were impressed by the forward thinking of Mechelen in the Eandis-Keerdok carpark, which envisions all future cars being EV and allows for multi-modal use with e-charging in bike lockers and provision for shared-car schemes.
<b>Website</b> <i>If available</i>	





**PROPOSED BY MECHELEN**

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	47. Mobile charging station
<b>Location</b> <i>name the city, region, state</i>	Pilot project in Antwerp, Belgium
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	You can order a mobile charging station by ordering it through an app. This machine then comes directly to you and charges your EV. (200 km in 40 min). If your vehicle is completely charged, someone will come back to pick up the mobile station. Regulations on itinerant trade are needed to legalize short-term idling of the mobile charging station
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i>	The mobile charging station simplifies the charging of an electric vehicle. This makes its use more attractive to those who hesitate to buy an EV because of the scarcity of charging stations or other practical reasons). An increase in EV use causes a decrease in the out state of carbon within the city.
<b>Website</b> <i>If available</i>	<a href="https://www.uze.energy/nl/">https://www.uze.energy/nl/</a> Kris Verdonck Dieter Schotte David Coertjens info@uze.energy

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	48. Compact E-parktower
<b>Location</b> <i>name the city, region, state</i>	Haltern Germany
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	C-Tower allows up to 16 vehicles to be vertically parked and charged in a space no larger than 60 m <sup>2</sup> . Each parking space is equipped with its own 22KW charging point and can be reserved via the mobile app. Each tower is also equipped with a PV system and battery pack to cover its own power consumption and has the ability to charge e-bikes and e-steps, for example. The optional LED advertising signs on either side of the tower ensure optimal visibility from every direction.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i>	The individual charging stations, compact dimensions and sustainable energy solutions make the C-tower a central part of the mobility hubs in future car-free city centres. Each C-tower also has its own PV-system with battery storage for charging e-bikes and e-steps. The attractiveness of charging your EV like this, together with the use of PV energy makes this a very green alternative where much less carbon is produced.
<b>Website</b> <i>If available</i>	<a href="https://www1.wdr.de/nachrichten/westfalen-lippe/e-parktower-parken-haltern-100.html">https://www1.wdr.de/nachrichten/westfalen-lippe/e-parktower-parken-haltern-100.html</a> <a href="https://vision-mobility.de/news/e-parktower-laden-und-parken-in-der-dritten-dimension-169828.html">https://vision-mobility.de/news/e-parktower-laden-und-parken-in-der-dritten-dimension-169828.html</a> <a href="https://efahrer.chip.de/news/ein-parkhaus-nur-fuer-e-autos-es-loest-viele-probleme_1011301">https://efahrer.chip.de/news/ein-parkhaus-nur-fuer-e-autos-es-loest-viele-probleme_1011301</a> <a href="https://www.c-tower.eu/">https://www.c-tower.eu/</a> <a href="https://www.e-parktower.com/">https://www.e-parktower.com/</a> Pieter Claes Info@c-tower.eu



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	49. Smart traffic lights (sittraffic Fusion)
<b>Location</b> <i>name the city, region, state</i>	London England
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	smart traffic light systems are connected to a cloud-based traffic management platform. They are often powered by predictive algorithms for dynamically adjusting traffic signals. Such that traffic is much more fluent and cars don't have to wait at a traffic light when there are no other vehicles.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i>	Fluent traffic makes travelling times much shorter, thus leads to a reduction in the emission of carbon of the car.
<b>Website</b> <i>If available</i>	<a href="https://www1.wdr.de/nachrichten/westfalen-lippe/e-parktower-parken-haltern-100.html">https://www1.wdr.de/nachrichten/westfalen-lippe/e-parktower-parken-haltern-100.html</a> <a href="https://vision-mobility.de/news/e-parktower-laden-und-parken-in-der-dritten-dimension-169828.html">https://vision-mobility.de/news/e-parktower-laden-und-parken-in-der-dritten-dimension-169828.html</a> <a href="https://efahrer.chip.de/news/ein-parkhaus-nur-fuer-e-autos-es-loest-viele-probleme_1011301">https://efahrer.chip.de/news/ein-parkhaus-nur-fuer-e-autos-es-loest-viele-probleme_1011301</a> <a href="https://www.c-tower.eu/">https://www.c-tower.eu/</a> <a href="https://www.e-parktower.com/">https://www.e-parktower.com/</a> Info-munich@intellias.com

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	50. Carsharing of EV via app – Share GmbH
<b>Location</b> <i>name the city, region, state</i>	Amsterdam, Copenhagen, Hamburg, Madrid...
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	This app checks the availability and proximity of different types of electric shared cars through an app either parked in specific parking spots or standard parking (with special permit)
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice and how it's related to ZCI</i>	The use of shared cars is very useful since, especially within a city, the use of a private passenger car is often unnecessary and not used very often. In addition, the use of electric shared cars is even better since they further significantly reduce carbon emissions. Thus, an interesting solution for individuals/families who rarely need a car.
<b>Website</b> <i>If available</i>	<a href="https://www.econstor.eu/bitstream/10419/209622/1/168_5754481.pdf">https://www.econstor.eu/bitstream/10419/209622/1/168_5754481.pdf</a>
	<a href="https://www.share-now.com/nl/nl/how-to-charge/">https://www.share-now.com/nl/nl/how-to-charge/</a> Business.nl@share-now.com



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	51. Electrical mobility hubs at district level
<b>Location</b> <i>name the city, region, state</i>	Amsterdam
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	eHubs (=neighborhood hubs) are demarcated areas where electric shared transportation is offered. Such as bicycle, cargo bikes, scooters or cars. Since these are concentrated and can be found together with certainty, an increase in use was denoted in Amsterdam after the implementation of the project.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	These hubs have the potential to encourage the use of alternatives to the private cars among citizens, thereby enhancing their quality of life, as well as the sustainability and the accessibility of the city. This promotes the use of shared mobility as well as the use of electric vehicles.
<b>Website</b> <i>If available</i>	<a href="https://www.polisnetwork.eu/news/amsterdam-launches-its-first-ehub-with-many-more-to-come/">https://www.polisnetwork.eu/news/amsterdam-launches-its-first-ehub-with-many-more-to-come/</a> buurthubs@amsterdam.nl

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	52. Weertenergie (neighbourhood battery)
<b>Location</b> <i>name the city, region, state</i>	Alweeterheide (The Netherlands)
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Battery that can be used in various ways, thus making locally placed central energy storage profitable. In this way, this energy can be used locally and one works self-sufficiently so that there is no cost to delivering energy.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	Using a neighbourhood battery reduces not only the cost to the user but also the cost for the planet. Indeed, locally generated energy implies a decrease in carbon emissions because of the lack of its transportation.
<b>Website</b> <i>If available</i>	<a href="https://www.scholt.nl/actueel/eerste-buurtbatterij-in-combinatie-met-zonnepark/">https://www.scholt.nl/actueel/eerste-buurtbatterij-in-combinatie-met-zonnepark/</a> info@scholt.nl



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	53. V2G or V2H (charging infrastructure)
<b>Location</b> <i>name the city, region, state</i>	Finland, Helsinki
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Virta - Solar energy stored in a battery or electrical energy refueled at a station during the day can be stored in the EV, if in the evening or consecutive cycle, this surplus can be used at home = HOME or returned to the grid = GRID
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	With vehicle-to-grid (V2G) technology, we can use electric vehicles to manage renewable energy demand better and balance our energy system. So, we can purchase energy at efficient times and reuse the energy excess afterwards for other purposes.
<b>Website</b> <i>If available</i>	<a href="https://www.smappee.com/blog/v2g-v2h/?gclid=EAIaIQobChMlipKt8s3MgAMVEcd3Ch11Aw_6EAAYAiAAEgLJYPD_BwE">https://www.smappee.com/blog/v2g-v2h/?gclid=EAIaIQobChMlipKt8s3MgAMVEcd3Ch11Aw_6EAAYAiAAEgLJYPD_BwE</a>
	<a href="https://www.virta.global/vehicle-to-grid-v2g">https://www.virta.global/vehicle-to-grid-v2g</a> eScan.liikennevirta.fi@opentext.com

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	54. Hydrogen fuel cell buses - Van Hool (bus supplier), Belgium
<b>Location</b> <i>name the city, region, state</i>	Stuttgart, Barcelona, Hamburg
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Use of hydrogen as a fuel for public transport. There are already many bus companies who offer these.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and how</u> it's related to ZCI</i>	The benefits of fuel cell buses in terms of achieving zero carbon emissions and promoting sustainable transportation are significant since they don't produce carbon. Besides implementing this in public transport sets a good example for individuals.
<b>Website</b> <i>If available</i>	<a href="https://www.fuelcellbuses.eu/public-transport-hydrogen/conference-towards-zero-emission-public-transport-fuel-cell-buses">https://www.fuelcellbuses.eu/public-transport-hydrogen/conference-towards-zero-emission-public-transport-fuel-cell-buses</a>
	<a href="https://www.fuelcellbuses.eu/">https://www.fuelcellbuses.eu/</a> <a href="https://www.vanhool.com/nl/voertuigen/openbaar-vervoer/waterstof">https://www.vanhool.com/nl/voertuigen/openbaar-vervoer/waterstof</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	55. PV powered EV together with V2G/V2H technology – TU Delft
<b>Location</b> <i>name the city, region, state</i>	
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	A substantial reduction in CO <sub>2</sub> emissions from EV usage can be achieved by the development of solutions based on photovoltaic (PV) systems as a primary energy source. PV charging stations can also provide additional services <i>via</i> vehicle-to-grid (V2G) and vehicle-to-home (V2H). These may increase the effective use of locally produced solar power.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and</u> how it's related to ZCI</i>	Since the use of solar energy reduces the amount of energy that is taped from the grid, this concept thus reduce the carbon output.
<b>Website</b> <i>If available</i>	<a href="https://www.tudelft.nl/ewi/over-de-faculteit/afdelingen/electrical-sustainable-energy/dc-systems-energy-conversion-storage/research/electric-vehicle-supported-pv-smart-grid">https://www.tudelft.nl/ewi/over-de-faculteit/afdelingen/electrical-sustainable-energy/dc-systems-energy-conversion-storage/research/electric-vehicle-supported-pv-smart-grid</a>  <a href="https://www.platformelectromobility.eu/2022/04/05/pv-ev- a-powerful-duo-to-make-europe-drive-clean/">https://www.platformelectromobility.eu/2022/04/05/pv-ev- a-powerful-duo-to-make-europe-drive-clean/</a>
	<a href="https://iea-pvps.org/key-topics/pv-powered-electric-vehicle- charging-stations/">https://iea-pvps.org/key-topics/pv-powered-electric-vehicle- charging-stations/</a> Gautham Ram Chandra Mouli G.R.ChandraMouli@tudelft.nl

<b>GOOD PRACTICE</b> <i>Please provide a title</i>	56. Siemens Hydrogen train
<b>Location</b> <i>name the city, region, state</i>	China, Groningen, Germany
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	Hydrogen train is a type of locomotive powered by hydrogen fuel cells, which generate electricity through a chemical reaction between hydrogen and oxygen. This clean energy source produces only water vapor as a byproduct, making hydrogen trains environmentally friendly alternatives to traditional diesel-powered trains.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and</u> how it's related to ZCI</i>	they produce only water vapor when generating electricity from hydrogen fuel cells. This means they don't emit gases or carbon dioxide, making them a sustainable and environmentally friendly mode of transportation that helps reduce overall carbon emissions.
<b>Website</b> <i>If available</i>	<a href="https://www.change.inc/mobiliteit/groningen-krijgt-eerste-groene-waterstoffreinen-van-nederland-39248">https://www.change.inc/mobiliteit/groningen-krijgt-eerste-groene-waterstoffreinen-van-nederland-39248</a> <a href="https://www.change.inc/mobiliteit/waterstoffrein-van-siemens-moet-duitse-spoor-vergroenen-38223">https://www.change.inc/mobiliteit/waterstoffrein-van-siemens-moet-duitse-spoor-vergroenen-38223</a> <a href="https://www.mobility.siemens.com/global/en/portfolio/rail/rolling-stock/commuter-and-regional-trains/mireo/mireo-plus-h.html">https://www.mobility.siemens.com/global/en/portfolio/rail/rolling-stock/commuter-and-regional-trains/mireo/mireo-plus-h.html</a>



<b>GOOD PRACTICE</b> <i>Please provide a title</i>	57. Hyperloop train (TU Delft)
<b>Location</b> <i>name the city, region, state</i>	Currently research in in TU Delft (planning a route between Netherlands and Germany)
<b>Short description</b> <i>(max 50 words)</i> <i>Provide a short description of the GP</i>	A hyperloop is a transportation system in which a magnetic levitation train travels through a vacuum tube. Because there is almost no air in the tubes, resistance is extremely low and very high speeds can be achieved, possibly up to 1,100 kilometers per hour.
<b>Justification</b> <i>(max 50 words)</i> <i>Describe in your view why it's a good practice <u>and</u> how it's related to ZCI</i>	This technique is extremely energy efficient and produces no noise and pollution! It is also a very fast way of traffic and will lower congestions of traffic (in normal car-traffic)
<b>Website</b> <i>If available</i>	<a href="https://www.hardt.global/">https://www.hardt.global/</a> <a href="https://www.rtlnieuws.nl/tech/artikel/5305515/hyperloop-europa-nederland-hardt-hyperloops#:~:text=Een%20hyperloop%20is%20een%20vervoersysteem,wel%201100%20kilometer%20per%20uur.">https://www.rtlnieuws.nl/tech/artikel/5305515/hyperloop-europa-nederland-hardt-hyperloops#:~:text=Een%20hyperloop%20is%20een%20vervoersysteem,wel%201100%20kilometer%20per%20uur.</a>

