

ICP-AGIR Cooperation Action Plan for TAOYUAN – BRAGA

Cooperation Data		
	NON-EU CITY: Taoyuan	EU CITY: Braga
Departments / Institutions involved	International Affairs Division	Sustainability Presidency Office
ICP AGIR City Coordinator	Daniel Ting-Yueh CHEN Officer	Hélder Costa
ICP AGIR Pairing Manager	Pairing Manager: Hui Qian (hui.qian@icp-agir.eu) Regional Coordinator: Megan Chow (megan.chow@icp-agir.eu)	
Description of the partnership	<p>Feb 10th: Had an initial greeting and discussion. Exchanged short introductions on Carbon emission reduction in mobility, smart city integration and circular economy in waste management sector.</p> <p>March 8th: The paired cities had their first bilateral meeting. Taoyuan Presented the city’s best practices on Green Transportation, Smart City and Waste Management). Braga presented the city’s best practices on Public Mobility, Circular Economy and Entrepreneurship and innovation. In the Discussion session, the topic of most discussed was green public transportation. Thus, in the next bilateral meeting, the paired city will focus on discussing green mobility.</p> <p>April 8th: Both cities focused on the Green Mobility on numbers of the transportation options: Bike, Scooter, Car, Bus. Under the overall Green Mobility theme, Taoyuan shared about the private stakeholders operating system bike, scooter, and car and Braga shared about the public Municipality operating system on bus.</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  <p>Shared Bicycle (2016.3 ~)</p> </div> <div style="font-size: small;"> <p>Shared Bicycle</p> <ul style="list-style-type: none"> 387 stations 10,000+ bikes 55+ Mn times 114+ Mn KM 2.1 KM per time 3-4 times per bicycle 24 times per bicycle @Taoyuan train station </div> <div style="text-align: right;">  </div> <div style="font-size: x-small;">  </div> </div>	



For the city of Braga, they shared about the current public transportation and the plan to transition to Green Mobility. The city applied for funds, investment and cohesion. Braga also shared Facts & Figures and their plan for the near future to tackle GHG in the city.



Top Photo: Braga's Electric Buses / Bottom Photo: Braga's Natural Gas

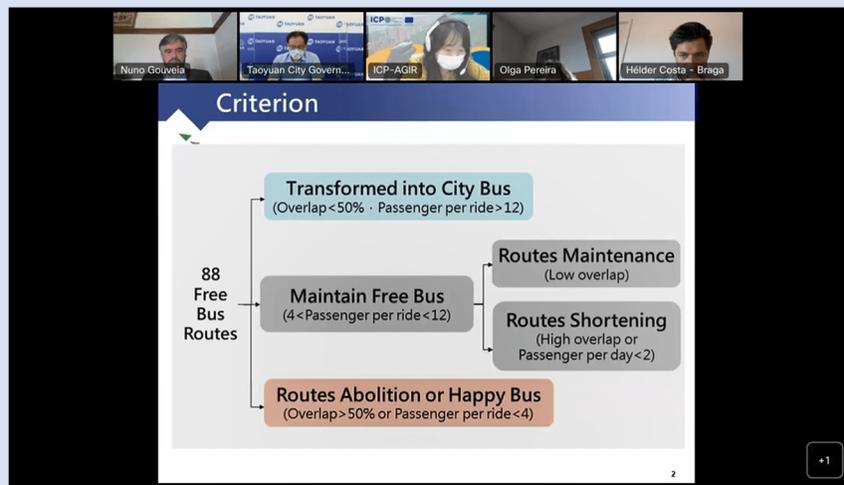
May 13th

The paired city conducted talks related to public transportation system in the rural area. Taoyuan presented their Happy Van Transportation project, which reached to higher satisfaction rate within the citizens. This innovative project also brings in the private sector to build their CSR. Braga city presented a tentative schedule for Taoyuan's visit to Braga. The paired city will present about innovative projects in their cities in the next bilateral meeting.

June 29th

Braga and Taoyuan met to discuss both cities' innovative projects in the field of green transportation. Braga shared the city's micro-mobility platform that supports green and active mobility. Taoyuan shared about the process and the outcomes of utilizing Big Data to determine the city's decisions regarding existing free buses.

Taoyuan shared about the free bus transformation planning utilizing Big Data. During the previous bilateral meeting, the city shared about the Happy Bus, a demand-driven bus service in rural areas. For this bilateral meeting, Taoyuan chose to share about how they have been working on transforming Taoyuan’s transportation into more efficient, sustainable methods. The example they shared on this time was regarding free buses. The city abolished inefficient courses and transformed the high-performing routes into city buses to increase the efficiency and maximize the use of public resources. With the support of Big Data, evaluation of bus routes was able to be conducted to determine whether routes should be consolidated, shortened, abolished, or adjusted.



Braga shared the details about their micro-mobility platform, “Bicification.” The platform supports the shift towards green, active mobility, by using a reward system that encourages users to use more bicycles and benefit from the incentive system. Through this platform, Braga also would like to seek and achieve integration between bus and soft modes such as cycling. This can help to tackle car dependency in the city. With the help of private stakeholders, such as local shop owners and public transportation companies, Braga is closer to achieving lower car dependency by developing a cycling culture.



July 27th

The paired city mainly exchanged the planned schedule of study visit for each other. The visit of Taoyuan to Braga is scheduled during Oct. 24-28, the visit of Braga to Taoyuan is tentatively scheduled during Nov 14-18 (Only if the quarantine regulations are lifted)

Sept. 7th

The paired city discussed about the topic that they want to focus for the project. Priority areas of the cooperation action plan have been confirmed, Taoyuan also suggested few targeted groups to be involved as stakeholders in the cooperation action plan.

Cooperation between universities, businesses and joint academic research topics have been proposed and endorsed initially. Cities need to discuss with various stakeholders to proceed with the actual cooperation plan.

Oct. 12th

The Paired city had Pre-visit meetings for the visit to Braga. Logistic questions were discussed.

Oct. 25th –27th

Study Visit to Braga

Feb. 23rd , 2023

The Paired city had Pre-visit meetings for the visit to Taoyuan. Logistic questions were discussed.

Mar. 28th –30th , 2023

Study Visit to Taoyuan

Best practices or Challenges identified in the questionnaire

Topic	Taoyuan	Braga
Green Mobility	<ol style="list-style-type: none"> 1) Reducing greenhouse gas emissions by promoting shared transport. 2) Reducing greenhouse gas emissions by promoting e-scooter and e-vehicle. 	<ol style="list-style-type: none"> 1) Decarbonise the mobility of the city of Braga in all means of transport 2) Increase the use of public transport supporting decarbonisation and comfortable mobility

Confirmation of Priority Areas	
Key focus of cooperation themes following the idea generation online workshop	Development of green mobility for decarbonization and reduction of GHG emissions
Short description of main actions and key outputs	<ol style="list-style-type: none"> 1. Connections and potential joint ventures between businesses in Taoyuan and Braga on the topic of green mobility 2. Potential academic connections between universities to conduct joint research and even develop student exchange programmes 3. Develop a joint research proposal for Horizon Europe on the topic of mobility.
Expected results and benefits	<ol style="list-style-type: none"> 1. Businesses in both cities would have access to technology and knowledge from the partner city and may be able to develop more innovative/effective solutions for decarbonization. 2. Beneficial for students and researchers, who will be the leaders of the next generation, to develop deeper, more meaningful connections and spearhead research in both cities. 3. Through academic connections, joint research papers or conferences may also be possible. 4. A successful joint proposal and application to Horizon Europe would be increased by the input of both cities, and the financial support from Horizon Europe would allow both cities to implement developed solutions.

Application of Circular Economy – Video to showcase the best practices from Taoyuan and Braga, as a preparation for the twinning city	
Counterparts	Municipality of Braga Taoyuan City Government

Objective	To make a video together to showcase the best practices of the cities and the cooperation actions from the ICP-AGIR project that the paired city has been discussing about.
Activities	<p>The paired city will make a 3-4 mins video together, with the text, pictures, video clips to showcase the best practices of Braga and Taoyuan.</p> <p>With the content shared from Braga, Taoyuan city will work with the video editor to work on the edition of the video.</p>
Outcomes	<p>The cooperation of the paired city will be documented with a video.</p> <p>The video can be used for promotion when the paired city signing for the Twinning City Agreement.</p>
Indicators	A 3-4 minute video will be made
Sustainability of the action	The video can be used as a summary of Braga and Taoyuan's partnership from the ICP-AGIR project, it can also be used as a promotional video when the paired city signing for Twinning City Agreement in the future. The video can be sustainable and played on many occasions.
Time and Resources	<p>The video is expected to be finished by early June, 2023.</p> <p>Financial Resource needed: Video edition: Approximately 3,000 Euros for a 3-4 mins video</p>

Academic partnership and Exchange program between University of Minho and YuanZe University – Circular Economy/Air Quality	
Counterparts	University of Minho Yuan Ze University Municipality of Braga Taoyuan City Government
Objective	To establish partnerships between key academic and research institutions in both cities to boost knowledge sharing and further sustainable development.
Activities	<ol style="list-style-type: none"> A. Establish a partnership between the University of Minho and Yuan Ze University on the topic of green mobility and fuel cells, for a potential joint application to International Credit Mobility fund within the Erasmus programme of the EU by late February (ideally). <ol style="list-style-type: none"> a. University of Minho to reach out to Taoyuan by late December/early January. B. Establish a partnership between International Iberian Nanotechnology Laboratory (INL) and a

	relevant counterpart in Taoyuan to cooperate on nanotechnology, if confidentiality and security regulations allow.
Outcomes	<p>A. Exchange programme for students and researchers between University of Minho and Yuan Ze University.</p> <p>B. Potential MOU signed between University of Minho and Yuan Ze University during the study visit to Taoyuan in February</p> <p>C. External funding from successful research applications.</p> <p>* Secondment staff from both cities</p>
Indicators	<p>In the long-term, number of students/researchers exchanged.</p> <p>Signed partnership agreement between institutions.</p> <p>Funding from successful applications.</p>
Sustainability of the action	Academic research and programs will be continued and long-term mobility between the universities will be carried on.
Time and Resources	<p>The discussions and meetings will start in December by discussing the potential joint research proposals that will be submitted to the International Credit Mobility fund within the Erasmus programme.</p> <p>More meetings and signed partnership agreement can be discussed follow-by and the agreement is expected to be signed in 2023.</p> <p>Financial Resource:</p> <p>1. During the discussion stage for details of this cooperation: Braga city will bear the cost to bring one delegate in Charge from Minho University to the study visit to Taoyuan for discussions with YuanZe University. Taoyuan City will bear the cost for the delegate's meal cost in Taoyuan. Estimated financial cost for this is 3000 euros.</p> <p>2. In the later stage: Detailed budget resource cannot be estimated at this moment due to the lack of discussion. Principally, the cost will be shared by both universities, or the universities could apply for a fund from EU together under the International Credit Mobility fund within the Erasmus programme.</p>

Air Quality – Green mobility and smart cities – digitalization of mobility services “smart green mobility”	
Counterparts	<p>Transportes Urbanos de Braga (TUB)</p> <p>Municipality of Braga</p> <p>Taoyuan City Government</p>

Objective	To seek solutions for digitalizing the public mobility services in Braga, with the application of Artificial Intelligence and smart Information system
Activities	Taoyuan City will recommend the local companies or service providers who can provide the technologies and equipment up to Braga's need.
Outcomes	Braga will have more solutions to better build the smart green mobility system.
Indicators	The knowledge exchange for the advanced technologies and the overall improvement of the digitalization in the public mobility system.
Sustainability of the action	Both cities can continue their partnership in developing other technologies and solutions which can integrate to green mobility system.
Time and Resources	<p>Time: Deeper cooperation will start with the signing of the Twinning City Agreement</p> <p>Resources: Resources required case by case.</p>

City Partnership Monitoring and Evaluation	
Description	
Mid-term evaluation	
Final evaluation	