ICP-AGIR Cooperation Action Plan for
TAICHUNG – PRATO

Cooperation Data		
	Taichung	**Prato**
Departments / Institutions involved	**Comprehensive Planning Division**	**European projects office Municipality of Prato**
ICP AGIR City Coordinator	**Hsin-Yun Chen** **Chief**	**Eng. Paolo Guarnieri** **Project Manager**
ICP AGIR Pairing Manager	**Regional Coordinator: Megan Chow (megan.chow@icp-agir.eu)** **Pairing Manager: Hui Qian (hui.qian@icp-agir.eu)**	
Description of the partnership	Feb 10th: Initial Greeting and short introductions on each city's best practices. Prato mainly introduced the textile waste recycling industry. Taichung expressed interest in Bio waste management and air quality improvement. March 14th: The paired city had the first bilateral meeting. Taichung presented about Used clothes recycling and recovering, Urban area Air Quality Purification Areas, and Food waste rapid composting treatment mode. Prato presented about Strategy for Circular Economy at Local Level, Textile waste recycling techniques and Urban Greening. The paired city has common interests in urban greening and circular economy in textile industry. The next meeting is scheduled to talk more details about Urban Greening. April 11th: Both cities shared presentation under the topic of Urban Greening. Prato focused on their new online platform to bridge stakeholders and implementation that emphasized the citizen's wellbeing overall. Taichung shared the two-park implementation are applied with numbers of green technologies and shared an incentive/cooperation system that can encourage numbers of stakeholders to achieve Urban Greening at the same time. June 9th: Both Cities presented their best practices on the circular economy in the textile industries. Taichung city is utilizing 60% of the second-hand clothing which cannot be donated or sale anymore to produce reusable resources. (Polyester becomes textile raw materials, and cotton becomes biofuel)	

They also transfer the PET bottles to clothing as a recycling for the PET bottles.
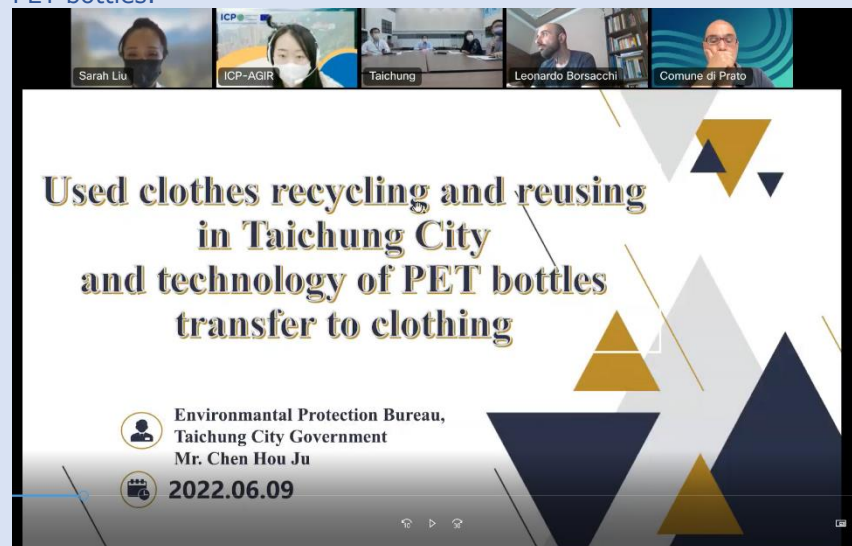
Prato City presented about their treatment traditions of fibers recycling, which is processing 15% of all recycled clothes in the world. Prato City has its unique technique in recycling the fabrics. Comparing with raising the sheep and using the virgin wool, the regenerated wool that Prato produces is much more environmental-friendly on regards of environmental footprint. A total of 239 enterprises in Prato have gained the Global Recycled Standard (GRS).
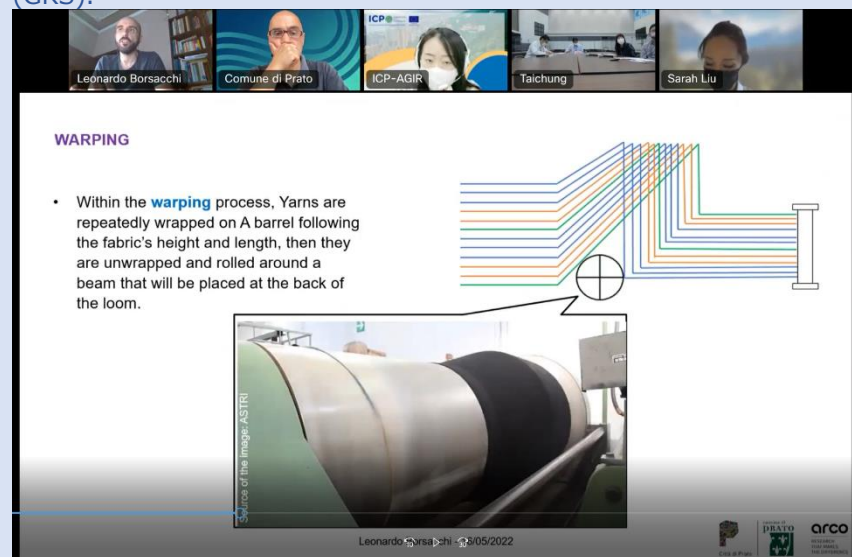
July 22nd
Both cities have presented the visit agenda for the paired city. Prato confirmed the study visit date to Taichung as Nov. 14-18. Taichung would like to postpone its visit to Prato to the beginning of December. Both cities will start to work on the Cooperation Action Plan (CAP), The next bilateral meeting will also focus on the CAP.

Oct. 13rd
Prato and Taichung started the brainstorm of CAP. To begin with, 2 cities have agreed to focus on 2 fields, Textile Recycling and Circular Economy in Textile industry, and the improvement of air quality by using Urban Greening.

Nov. 7th
Prato and Taichung have pushed further on the development of the CAP. Cities discussed more details on the CAP plan on exchanging of existing renovation/building design plans for each other's cities for feedback and potential implementation. The paired city reached the agreement to hold one workshop each during the study visits as the other two CAP plan.

Dec. 15th
The paired city worked hard in finalizing the CAP plan and Study Visit dates. The paired city agreed to put the organization of 2 workshops as the same Action for the CAP plan, divided by 2 parts holds prospectively by the hosting city during each study visit. Prato city also expressed willingness to bring 2 more delegates to visit Taichung.

Jan. 16th
The Paired city had a Pre-visit meeting for the upcoming study visits, first to Taichung, then to Prato.

Feb. 13-15
Study visit to Taichung

Although the two cities have met 9 times through virtual bilateral meetings, they were finally able to meet in person during Prato's study visit to Taichung from 12-15 February 2023. Through the study visit, the two cities identified some key actions they can take together after visiting places like Heart Valley, Maple Garden, and the Wastewater Treatment Plant at CTSP. Taichung will visit Prato at the end of February in their reciprocal visit.

Feb. 27- Mar.3
Study visit to Prato

The Taichung delegates visited Prato from 27 February to 3 March 2023 as a rapid follow-up to the study visit of Prato to Taichung that took place just two weeks before. The Taichung delegates had a chance to learn about Prato's famous textile recycling through first-hand experience, and also about their wastewater treatment management, especially in the recycling of water. With long-lasting actions like a co-developed board game, knowledge exchange, and intention to sign an MOU, we expect that Prato and Taichung will remain close partners in the years to come.

Best practices or Challenges identified in the questionnaire		
Topic	NON-EU CITY: Taichung	EU City: Prato
Textile Recycling and Circular Economy	In Taichung city, used clothes can be recycled in two ways, one is recycled by Environmental protection bureau. There were recycled by cleaning units about 96% and be collected from reservation about 4%. Another way is recycled by private units like social welfare organization or chain clothes store.	Recovery and recycling of natural fibers from rags and used clothes were (and are) the basis for the Prato's yarn and textile industry. Prato has been always a model of innovation in this sector having historically based its industrial fortune on the reuse of waste from the textile process and on the reuse of second-hand clothing from all over the world. Rugs and scraps are firstly sorted by

	Whether used clothes sell to recycle company or be recycled by private units, they will sell or export to reuse. For now, there are two technology of reusing used clothes in Taiwan, one is regeneration technology of textile in chemistry recycling method, let used clothes (contain at least 70% polyester) transfer to textile raw materials. Another technology of reusing used clothes is regenerate used clothes to solid recycling fuel (SRF).	quality considering the type of materials and taking into account their fineness, fibres' properties and the provenience of the garments. Later they are grouped by colour shade. The subsequent production process limits the use of chemical colourants and reuse reclaimed treated water. At the moment discussion is ongoing between representatives of entrepreneurs and regional/national authorities in order to try to overcome legislation that limits the use of textile waste as byproducts or secondary raw material, especially in sectors different than textile (also technological and marketing barriers are present).

Urban Greening for improvement of air quality	**Best Practices：Promote the establishment of air quality purification zones & green space beautification**
	   1. Mentoring landscaping on idle or dirty public and private land, widely planted as greenery, There are 36 air quality purification zones (with an area of 127 hectares) and 146 landscaping and beautification sites (with an area of 36 hectares) to achieve the purpose of improving air quality.
	   2. After setting, in addition to improving the quality of the environment, it can also be used as a place for public leisure activities and combine with ecological environment education to improve overall performance.
	
	Best Practices：Promote campus clean air green wall
	   1. Promote the establishment of green walls on campus, use the parapet flower stand in the corridor outside the classroom, planting with air-purifying
		Best Practices： Urban Jungles
		Prato is the leading municipal authority of the "Prato Urban Jungle" project (PUJ) funded by the Urban Innovative Actions Programme.
		The PUJ project fosters creative and visionary urban re-design for re-naturing Prato's neighborhoods in a sustainable and socially inclusive way.
		The Urban Jungles created by the PUJ project are intensely green areas, designed to be embedded in the urban planimetry, that establish and multiply the natural capacity of plants to abate pollutants, while restoring unused soil and space to community fruition, and turning marginal and decadent areas into life- giving green active hubs within the city.
		Urban Jungles constitute a ground-breaking nature- based solution for sustainable land use within the city. The PUJ project (2019-2023) is developing three pilots through community-led design for developing and maintaining the Urban Jungles.

	benefits, choose plants with low maintenance, Aside from improving air quality, the practices lower the indoor temperature.
	2. At present, the city has completed the installation of clean air green walls in 25 campuses, and set up area of 1,132 square meters.

Confirmation of Priority Areas	
Key focus of cooperation themes following the idea generation online workshop	1. **Circular Economy - Textile Recycling** 2. **Circular Economy – Wastewater Treatment and Reuse of Byproducts** 3. Urban Greening for improvement of air quality
Short description of main actions and key outputs	1. Joint workshops on green walls and sustainable recycling in the textile industry. 2. Development and production of a Circular Economy Board Game in English for distribution and future joint educational programmes with the University of Florence and Taichung's stakeholder. 3. Data and knowledge exchange on the use of dehydrated sludge from industrial wastewater management as educational and construction tools. 4. Collaboration between University of Florence and Central Taiwan Science Park on educational programmes for university students/adults.
Expected results and benefits	1. Involvement of stakeholders from different sectors and diversification of experience to develop better mutual understanding and knowledge pools. 2. Knowledge sharing between two cities and co-development of solutions for shared interests. 3. A board game developed together between the cities to promote both cities' circular economy best practices. 4. Contribution to revision of Italian laws regarding the usage of sludge to increase reuse of products produced as a result of industrial waste water management. 5. Educational programmes targeting environmental education for university students and adults.

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Environmental Education through Circular Economy Board Game	
Counterparts	Prato: Municipality of Prato, PIN - University of Florence **(Leonardo Borsacchi)** Taichung : Taichung City Government, Heart Valley **(Pearl Wen)** ICP-AGIR: Raul Daussa (board game design, circular economy expert)
Objective	To jointly develop a board game on circular economy (recycled textiles) from Taichung and Prato's best practices, in order to facilitate the use of the board game as an educational tool for environmental education.
Activities	1. PIN – University of Florence and Heart Valley will draft the content of the board game together. 2. Create the design of the board game and develop rules. 3. Produce the board game in English. 4. Use the product as an educational tool in a launching activity.
Outcomes	1. A board game that can be used as an educational tool for environmental awareness and circular economy best practices from both cities. 2. A long-term cooperation between PIN and Heart Valley through the city governments. 3. Educational programme to be developed using the board games
Indicators	1. Timeline established for the progress of the project 2. Online meetings between PIN and Heart Valley 3. Draft of board game content in document form 4. Draft of rules and concept of the board game
Sustainability of the action	The board game can be used in educating countless people and can also be used in other trainings abroad once translated into English, thus improving its replicability and long-term benefits. It can also serve to promote Taichung and Prato's best practices.
Time and Resources	Time: During 2023 Financial Resources: *The ICP-AGIR competitive award of 1500 EUR will contribute towards the production of this board game.* • Professional consultation for development of content of the board game (?) – May just include municipality stakeholders, is cost needed? • **Cost to produce the physical board game – design, prototype, finalized copies**

Data and Knowledge Exchange on Water Management Policies	
Counterparts	Prato: GIDA **(Daniele Daddi)**, Municipality of Prato, PIN - University of Florence Taichung: Central Taiwan Science Park, Wastewater Treatment Park, Taichung City Government (**Hsin-Yun Chen [Johnny]**)
Objective	For Prato to learn knowledge and receive data from CTSP, WWTP, and Taichung's experience with industrial sludge to have a better understanding on the reuse of industrial sludge as an educational or construction tool. For Taichung to learn knowledge and receive data from GIDA and Prato's experience with the process of recycling water to bring down the cost of recycled water in Taichung and improve the appeal of recycled water for use.
Activities	1. Collection of data on respective practices from both sides 2. Exchange of information and data sheets 3. Review of data and online meetings to clarify questions
Outcomes	1. Consolidated data on the safety and treatment of industrial sludge 2. Deeper understanding on the ability to use sludge in construction of bricks for roads or as educational tools for lessons. 3. Consolidated data on the process of treating and recycling water 4. Reducing the cost to recycle water in Taichung for improved usage
Indicators	1. Collection of data from both sides 2. Exchange of data 3. Online meetings for deeper understanding every month or two months (regular)
Sustainability of the action	Self-sustaining knowledge exchange
Time and Resources	Time: During 2023 Resources: No financial resources needed

Sister/Friendship City Agreement + MOU	
Counterparts	Municipality of Prato (**Gabriele Bosi, Eleonora della Ratta**) Taichung City Government, International Affairs Division (**Roy Hong**)

Objective	To consolidate the cooperation between Prato and Taichung past the timeframe of the ICP-AGIR project.
Activities	1. Provide a MOU template to review and revise 2. Draft an MOU to be reviewed by both cities 3. Sign the MOU in a signing ceremony once agreed upon 4. Discuss next steps for friendship city agreement 5. Sign a friendship city agreement 6. Establish deeper relationship for a sister city agreement 7. Sign a sister city agreement
Outcomes	1. Signed MOU 2. Friendship city agreement 3. Sister city agreement 4. Prato will be on Taichung's map of sister/friendship cities
Indicator	1. Draft MOU 2. Draft friendship city agreement 3. Draft sister city agreement
Sustainability of the action	This action will ensure that the effects of the ICP-AGIR project will continue past the end of the project in May 2023.
Time and Resources	Project to sign an MOU within 2023 Aim to complete friendship city agreement prior to May 2024

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