

ICP-AGIR Cooperation Action Plan for GWANGJU (Korea) – ATHENS (Greece)

Cooperation Data		
	Gwangju	Athens
Departments / Institutions involved	Int'l Climate and Environment Center (ICEC)	Regional Development Fund of Attica
ICP AGIR City Coordinator	Seung Ho Seo Project Manager (samuel@icecgj.or.kr)	Kostas Karamarkos Strategic Planner (kostas@kkc.gr)
ICP AGIR Pairing Manager	Regional Coordinator: Megan C agir.eu) Pairing Manager: Yookyung Oh	
Description of the partnership	ICEC (International Climate & Envihighly involved in Air Quality and be exchange air quality initiatives at t 15. Meeting agenda and discussion exchanges. The first bilateral meeting between	ooth Gwangju and Athens will he first bilateral meeting on March points will be set through email a Athens and Gwangju was angju shared Gwangju's 2045 Net-Decision Support Systems and ablishing policies based on a presentation, Athens shared The mate Change (RPACC) of Attica opean Research Program solar "cadastre" for Athens. Both ties of collaboration on utilizing ing and deep-dive discussions on





The second bilateral meeting was conducted on April 20, 2022. Athens shared disaster risk management master plan & high-resolution climate projections in Attica. To deliver the presentations, Dr. Christos Giannakopoulos (RESEARCH DIRECTOR, National Observatory of Athens), and Ms. Alexia Tsouni (Research Associate of BEYOND Center of Earth Observation and Satellite Remote Sensing) partcipated the meeting as a guest presenter. Followed by Athens, Gwangju shared past and on-going green remodelling projects in Gwangju. To reduce GHG emission by improving energy efficiency of aged buildings, Gwangju has implemented green remodelling for 155 public building since 2021, and the city will conduct 139 more green remodelling in 2022.

Figure 2. A snapshot of the second bilateral meeting of Gwangju and Athens



To strengthen the partnership between Gwangju and Athens, the first study visit to Athens was conducted from June 7 to June 11. Gwangiu delegates visited National Observatory of Athens and AirTech Lab located in National Center for Scientific Research (Demokritos) and learned about air quality monitoring infrastructure and relevant activities in the Region of Attica. Especially in AirTech Lab, Gwangju delegates had an opportunity to visit AirTech chemical laboratory for chemical analysis and source apportionment techniques, and the Urban background Monitoring station for Aerosol properties (Environmental Radioactivity Lab). Through this study visit, both cities agreed to focus on the Smart City for Climate Change Response and Air Quality mainly on carbon neutrality through air quality improvement. Both cities also affirmed that they would like to join each city's annual conferences or exhibitions, such as Gwangju's Climate Change Response Exhibition in September 2023. Lastly, they also discussed the possibility of applying for future EU programme like Horizon Europe.

Figure 3. A snapshot of the first study visit in Athens







As a reciprocal study visit of the ICP-AGIR programme, the delegation from Athens visited Gwangju on July 12 and conducted study visit until July 15. Athens delegates visited Gwangju Global Motors, Yeongsan River Basin Environment Agency, and Korea Global Atmosphere Watch Center in Anmyeondo. At the Gwangju Global Motors, the delegates from Athens mainly learned about the factory and how it prioritizes coexistence, safety, and innovation. The Vice President of Gwangju Global Motors briefly introduced about the history of GGM and the automated factory system. GGM was founded as the first case of coexistence local job creation project to vitalize local economy. While at Gwangju Global Motors, the delegates got the opportunity to view in real life drone technology and mobile air quality monitoring systems, courtesy of the Yeongsan River Basin Environmental Agency.

From this visit, both cities again discussed the cooperation action plan for future partnership projects, and they made some revisions on the activity plan and meeting topics. The first activity they confirmed that they would like to work on together on a joint proposal application for Horizon Europe, including multiple potential stakeholders from the city governments to research institutes to universities. The potential counterparts of this activity are National Oberservatory of Athens, Demokritos Research Institute, ICEC, Region of Attica, Gwangju Metropolitan City, Chonnam National University, Chosun University, GIST and UEA. Secondly, both cities agreed that they would like to participate in each other's conferences which will be held by each regional government and make presentations, exchanging opportunities to outreach to a new network. Finally, they expressed interest in attending COP27 together and cross-participating in each other's sessions.

Figure 4. A snapshot of the second study visit in Gwangju







	Best practices or Challenges identifie	ed in the questionnaire
Торіс	Gwangju, Republic of Korea	Athens, Greece
Smart City for Climate Change Response (Air Quality focus)	Cooperation with International Climate & Environment (ICEC) – science-based technology to realize Carbon-Neutral City Goal to achieve Net-Zero Energy Independent City. Three Policies will help Gwangju to become a Smart City, Green Transition City, Climate Safe City, Green Industry City Operating the Tech-sharing programs for the UEA (Urban Environmental Accords) member cities – Gwangju is an exemplary case of urban policy cooperation through int. network activities at city-level climate, environment sector, tech sharing for international cooperation projects.	Low Carbon Emission in Urban Area: actions to increase energy efficiency, especially, in the public sectors and limited numbers of private houses; in the context of urban regeneration actions. Investing in Green Energy Transition: Energy Saving – New Technologies, National Plan for Energy and Climate (2020), various research programs in the policy topic of air quality. RPACC Master plan of the Region of Attica for Climate Change Adaptation Observatory of Climate Change Adaptation
	 DRR and Management Systems Risk assessment, early warning, emergency response, and disaster recovery systems Urban Assessment Model System (UAMS) – predict and 	National Air Pollution Monitoring Network (EDPAR) – expanding and upgrading the existing network of the Athens basin, connected with European Environmental Agency





analyse the wind path, thermal environment, and air quality of the city. Used it as a scientific analysis tool in improving the air quality of overall Gwangju.

Energy Independence

Energy Transition Village –
 Community to achieve Carbon Neutrality and Energy Self Sufficiency

Urban Environment Accords (UEA)

 Science sharing programme related to climate and environment science (ex. Engineering, etc.) • PANACEA (Real Time Data) –
joint research activity of
University and Research Centers:
addresses the need for
monitoring of atmospheric
composition, solar radiation
variations, climate change, and
related natural hazards in
Greece. Helps to provide a
tailored services to national
economy sectors that affected by
the air pollution/climate change

Disaster Management

- Earthquakes
- Flood: BEYOND Flood Hub, MANDARA (Official Flood Hazard Map)
- Wildfires
- Disaster Management Platforms/Systems
 - o Web Geo-Portal
 - Fast-Track Studies (Wildfires)

Confirmation of Priority Areas	
Key focus of cooperation themes following the idea generation online workshop	Smart City for the purpose of achieving carbon neutrality, with Air Quality as the current focus
Short description of main actions and key outputs	 Joint proposal from Gwangju and Athens stakeholders for application to future EU programmes like Horizon Europe Business profile from the organizations (specific focus area, which stakeholders (NOA, DEMOKRITOS research center, ICEC) More information from NOA or DEMOKRITOS about their current EU projects If Region of Attica joins UEA, it can be very helpful as well for both cities to submit joint projects Region of Attica also can directly connect ICEC with NOA or DEMOKRITOS NOA / DEMOKRITOS has many projects that ICEC can be interested in Usually NOA work very closely with Region of Attica In Gwangju, we have Chonnam national university (has international cooperation/exchange center), Chosun university, and GIST (has climate & environment center)





Confirmation of Priority Areas		
	•	who also can participate together and work together with Region of Attica In Chonn-nam area (province), there are 22 universities Invitation from Gwangju to Athens to attend the annual Climate Change Response Exhibition for September 2023 ICEC suggested Athens Metropolitan Area to attend annual Climate Change Response Exhibition in Gwangju Also needs to be consulted with RDFA in terms of participation Region of Attica can find more exhibitions or conference for ICEC or Gwangju Metropolitan City can join and participate Because of COVID19, many exhibitions or events are postponed. But Attica can get back to this by the end of November COP 27 Meeting ICEC is aiming to hold a session at the COP So ICEC invites Region of Attica to attend the session by ICEC Region of Attica also normally attend COP (ICEC organized a session at the last COP as well) ICEC and Region of Attica can cross participate the session that will be organized by each city We can work together on this in future more specifically about the session
Expected results and benefits		 Common participation in a proposal to programmes such as Horizon Europe or other funding opportunities (1) Athens' attendance at the Climate Change Response Exhibition would benefit both cities in knowledge sharing and give Athens an opportunity to exhibit their best practices to Korean participants; offer from Athens to check on similar conferences/exhibitions will be in Athens next year to offer a reciprocal opportunity to Gwangju (private/public partnerships)

Air Quality - Climate Change Conference	
Counterparts	Region of Attica, Gwangju Metropolitan City, ICEC, KDJ Convention Center, City of Athens
Objective	Urban Climate Assessment, Disaster Risk Reduction
Activities	Region of Attica participate annual Climate Change Response Exhibition for September 2023 in Gwangju Gwangju will participate reciprocal exhibition/conference or other event in Region of Attica





Air Quality - Joint Application for External Funding	
Counterparts	(Potential) NOA, DEMOKRITOS, ICEC, Region of Attica, Gwangju Metropolitan City, Chonnam national university, Chosun University, GIST, UEA
Objective	Urban Climate Assessment, Disaster Risk Reduction
Activities	Joint proposal from Gwangju and Athens stakeholders for application to Horizon Europe
Outcomes	Strengthen partnership between local municipalities and research institutes in Gwangju and Region of Attica Develop Air Quality Assessment Module together to support cities to develop better polices aligned with EU Green Deal and 2050 Carbon Neutral Strategy of Republic of Korea
Indicators	Application for the Horizon Europe
Sustainability of the action	Ongoing - 2027
Time and Resources	External Funding

Climate Change – Joint Participation to COP 27	
Counterparts	Region of Attica, ICEC, UEA
Objective	Urban Climate Assessment, Disaster Risk Reduction
Activities	Participate COP 27 Meeting together - ICEC is aiming to hold a session at the COP - Region of Attica also normally attend COP and will organize a session in COP





Climate Change – Joint Participation to COP 27	
	- ICEC and Region of Attica can cross participate the session that will be organized by each city
Outcomes	Participation to COP 27 Possible Cross Presentations at the COP27
Indicators	Number of presentations
Sustainability of the action	One time event
Time and Resources	November 2022 Partners' own resources

City Partnership Monitoring and Evaluation	
Description	Action 3) Joint Participation to COP 27 event
Mid-term evaluation	Action 3) On November 18, Region of Attica participated ICEC's International Forum online during COP27 in Egypt. Mrs. Antigoni Gkoufa from Region of Attica presented. John Land Participation of Attica pre
Final evaluation	Action 3) COP27 participation is completed. Gwangju ICEC will organize a similar event at COP28, and will invite delegations from Athens.