

ICP-AGIR Best Practice for Gwangju (Rep. of Korea) / Athens (Greece)

| Gwangju's Green Remodelling Project | |
|---|---|
| | Gwangju Metropolitan City (Republic of Korea) |
| Departments / Institutions involved | International Climate & Environment Center(ICEC) |
| ICP AGIR City Coordinator and contact data | Samuel Seung Ho Seo Project Manager samuel@icecgj.or.kr |
| ICP AGIR Pairing Manager | Yookyung Oh Yookyung.oh@icp-agir.eu |
| Description of the best practice | Implemented annually, this initiative aims to reduce GHG emissions by improving energy efficiency in the building, particularly in the public sector such as daycare center and health care center. This year, 139 public buildings were targeted for remodeling. |
| Theme and sub-theme if appropriate | |

| Description of Best practice | |
|------------------------------|---|
| Challenge Addressed | <ul style="list-style-type: none"> • Gwangju Metropolitan city is surrounded by the Jeonnam province. They have many old buildings in the region, and knowledge and technology in building sector is yet spread over (not collected) in colleges, industry, organizations, and government. |
| Solution Implemented | <ul style="list-style-type: none"> • Gwangju and Jeonnam built a consortium(cluster) for collective knowledge and technology in green remodeling field, and foster human resources in related field which local government require. • Selecting the public sector was the key for the efficient implementation and direct access for the vulnerability (children, the aged, people in need of medical care) • Most of all, roles of public buildings are to provide public services to citizens, especially for those in need of public help such as care of children, the aged, and the physically challenged. To this end, daycare centers, public health centers, etc. were targeted. |

| | |
|------------------------|--|
| Partnerships | <p>Gwangju Metropolitan City Authority of Land & Infrastructure Safety International Climate & Environment Center Chosun University(Gwangju, Rep. of Korea)</p> |
| Lessons Learned | <p><Key Outcomes></p> <ul style="list-style-type: none"> • Targets: 139 old buildings in the region (as of 2022) • Energy Saving & GHG Reduction (before remodeling -> after remodeling) <ul style="list-style-type: none"> - Energy demand: 4,609,310 kWh/m² -> 3,459,540 kWh/m² (reduced by 24.9%) - Energy use: 4,053,470 kWh/m² -> 2,740,113 kWh/m² (reduced by 32.4%) - GHG emissions: 1,614,761 kgCO₂eq -> 1,116,676 kgCO₂eq (reduced by 30.8%) <p><Services Provided to Participants(Citizens)></p> <ul style="list-style-type: none"> • Remodelling of old public buildings • Field survey, energy performance assessment • Satisfaction survey by users and residents in the targeted building (91% satisfied to the initiative) • Fostering human resources and industry in fields of green remodeling |
| Main Milestones | <ul style="list-style-type: none"> • This initiative is an annual-basis project. Accumulation of data and target buildings year by year will contribute to more resilient buildings in the region. • Success of this project (targeted to public buildings as of now) will affect involvement of more buildings in private sector. |

| Materials for promotion | |
|---------------------------------------|--|
| Quote from city representative | <p>“Fundamental solution for rising heating bills is improvement of housing environment”</p> <p>Citizens suffer from high-rising heating bills in winter. Not only the green remodelling of old buildings but also expansion of green buildings will be implemented to improve energy efficiency in building sector, save energy costs, reduce GHG emissions, and further contribute to Gwangju’s carbon neutrality goal by 2045.</p> <p>Reference : Moodeung Daily, Feb. 08 2023 http://www.mdilbo.com/detail/0kIA7d/688294</p> |

Materials for promotion

Graphic Material



Stakeholder Meeting



Remodeled Health Care Center

Materials for promotion



Energy Efficient equipment installed (daycare center)

Online links

Website : <https://icecgj.or.kr/kor/>

YouTube(Kor) : <https://www.youtube.com/@icec7070>

YouTube(Eng)

<https://www.youtube.com/@urbanenvironmentalaccords6988>

: