

Hospital Improvements for a Just and Green Recovery in Jakarta, Indonesia

Improving the energy performance of 27 public hospitals through rooftop solar PV and energy efficiency solutions



Project Sector:
Renewable Energy, Energy Efficiency, Buildings



Project Partner:
Jakarta City



Total investment volume:
7.9 million EUR



10 million
RESIDENTS BENEFITTED



668 estimated
JOB-YEARS
during construction



emission reduction
557,535 t
CO₂e over 25 years

The project was initiated during the COVID-19 pandemic when most of the city's budget resources were diverted to pandemic mitigation. This required the city to seek external financing solutions. CFF supported the city in analysing Jakarta's context and proposed realistic finance options, allowing the project to go ahead. The project proves financial viability for renewable energy and energy efficiency solutions in public buildings in Indonesia. It can leverage the expertise and efficiency of private investment while reducing the financial burden on public resources.

BEST PRACTICES Jakarta's partnership with Health Care Without Harm (HCWH) leverages global expertise to promote sustainable healthcare. HCWH's Climate Impact Check-Up Tool is designed to help hospitals calculate and monitor their emission footprints. The project integrated the tool and trained health workers on various topics. This was key to maximise the co-benefits of the partnership.

Financing Solution

To supplement the local budget, the city is considering applying for grant funding for this project. Alternatively, a public-private partnership (PPP) could be pursued. PPPs in Jakarta can take up to a year to initiate, but CFF's support has helped the project team prepare the foundational information required for the PPP process, making it a feasible option.

"I want to thank CFF for its support in implementing the renewable energy and energy efficient solutions through this project. We gained a lot of knowledge that can be implemented in other projects such as the different financing options, equity and inclusion considerations, and stakeholder engagement strategies."



AYIFUL ASIT Head of Renewable Energy Section, Agency for Manpower, Transmigration and Energy, City of Jakarta



CFF developed equity and inclusion (E&I) guidelines to embed inclusive practices into the project's design and delivery.

- E&I guidelines and capacity development shifted mindsets on the importance of E&I in infrastructure projects.
- Recommended a target of 25% female participation in the construction and operation of energy projects, aligned with international best practices.
- While not mandatory, the target informed procurement and promoted a diverse and inclusive workforce.
- The city has since embraced and mainstreamed these approaches into standard project processes.



CFF supported the development of a business case covering all 27 hospitals.

- Feasibility studies included cost estimates, GHG emission reduction projections, and finance options for the project's renewable energy and energy efficiency components.
- Confirmed the project's technical and financial feasibility.
- Aligned with Jakarta's Climate Action Plan, targeting a 50% emissions reduction by 2030 and net zero by 2050.
- Positioned the project as a scalable pilot for all public buildings in Jakarta and national health facilities.



CFF's City Academy on Finance and Equity (CAFE) focusing on energy and buildings was particularly impactful for the city.

- Included a site visit to a certified Green Building, the Ministry of Public Works Building.
- Strengthened the city's understanding of project management, equity and inclusion, and financing options.
- Financing emerged as the area of greatest learning for city delegates.
- The inter-departmental steering structure was seen as a useful model for future city projects.



The project aligns with Jakarta's climate ambitions and Indonesia's Just Energy Transition Partnership.

- Led by the Department of Transmission, Manpower and Energy, through a Task Force for Climate Action and Disaster Mitigation.
- Strengthened coordination within Jakarta's provincial government structures.
- Financing proposals and cost-benefit analysis increased political support for this and similar projects.
- Political backing could inform a new PPP methodology in Jakarta, particularly for smaller, sustainable infrastructure.



KEY CHALLENGES

Although hospitals have high, 24/7 energy needs, focusing on them was challenging due to subsidised energy costs, which limit the appeal of cost savings. However, other public and private buildings could benefit significantly from the approach, incentivising broader replication. Navigating Indonesia's complex PPP regulatory framework for projects of this scale was also a challenge, but overcoming it will pave the way for similar models in the future.



LESSONS LEARNED

Future projects will benefit from a diverse selection of public buildings, based on cost-benefit analyses, which ensures a focus on sites with the strongest potential impact. The integration of energy storage into future solar PV projects will support a steady supply of electricity, which is important for complying with Jakarta's regulations.



OUTLOOK

The feasibility study shows promising potential for cost savings and CO2 emission reduction. With tailored PPP financing and political support, the project has the potential to be expanded to all public buildings in Jakarta and beyond.

Implementing agencies



Funding partners



Federal Ministry
for Economic Cooperation
and Development



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