

Green Cities & Climate-Resilient Urban Development in Palestine

- Implementing agency: Enabel, the Belgian Agency for international Cooperation
- Focus area: Sustainable Urban Planning, Energy Efficiency, Green Public Spaces & Green Corridors
- Target regions: West Bank (Clusters: Ramallah/Al-Bireh)
- Strategic financing: Supported by the Brussels Capital Region (€1,000,000; 2023–2026), this initiative integrates a vital climate dimension into the "Green West Bank" portfolio. The "Top-Up" fund specifically targets urban resilience through the creation of Green Corridors and the development of a national Building Energy Performance (BEP) tool, leveraging Brussels' expertise in sustainable urbanism.



1. Context & strategic overview

Palestine faces rapid urbanization (over 75% urban population), high urban density, and severe lack of public green space. These factors exacerbate "urban heat island" effects and limit active mobility. Simultaneously, the building sector is a major consumer of energy, yet lacks a standardized system for measuring or regulating efficiency.

Response: Moving beyond traditional infrastructure, the action adopts a holistic urban planning approach driven by academic cooperation and institutional strengthening:

- **Climate Adaptation:** Mitigating heat stress through green infrastructure and "cool" urban design.
- **Climate Mitigation:** Reducing energy consumption in the housing sector via regulation and ratings.
- **Social Inclusion:** Reclaiming public space for citizens, women, and youth to promote social interaction.
- **Academic Innovation:** fostering North-South knowledge exchange to build long-term local capacity. Key pillars of intervention

2. Key pillars of intervention

A. Green Buildings & Energy Efficiency

To transform the construction market, the project supports the Palestinian Energy & Natural Resources Authority (PENRA) in regulating energy use:

- **Building Energy Performance (BEP) Tool:** Development of a software tool tailored to the Palestinian context (climate, materials, typology) to calculate and rate building energy efficiency. This mirrors the successful regulatory frameworks used in the Brussels Capital Region.
- **Regulatory Framework:** The tool serves as a cornerstone for future mandatory energy ratings, aiming to mainstream energy-efficient design in new constructions and retrofits.

B. Green Corridors & Public Spaces

The project promotes **active mobility** (walking/cycling) and urban greening through "Green Corridors" — networks of interconnected public spaces.

- **Al-Bireh Pilot:** Construction of a demonstrative green corridor in the Al-Bireh metropolitan area. The design focuses on reclaiming street space from cars, introducing vegetation for cooling, and ensuring safe access for women and vulnerable groups.
- **Tactical Urbanism:** Testing interventions through low-cost, temporary changes (e.g., pop-up parks, pedestrianization) to build community support before permanent infrastructure works.

C. Academic Collaboration & Capacity Building

Sustainability is anchored in a unique partnership between **Birzeit University (West Bank)** and **KU Leuven (Belgium)**:

- **Joint Design Studios:** "Studio Palestine" connects Belgian and Palestinian architecture students to co-design climate-resilient urban solutions.
- **Skills Transfer:** Developing a new Online Master's Program in sustainable spatial planning to address the local skills gap.
- **Institutional Support:** Capacity building for the Ministry of Local Government (MoLG) and Municipalities to develop Strategic Development Frameworks (SDFs) that prioritize climate resilience.

3. Impact & Results

The current BCR Top-Up phase is in active implementation.

- **BEP Tool Development:** Development is underway to adapt the Brussels methodology to Palestinian climatic zones.
- **Urban Design Studios:** The Joint Collaborative Design Studio is active. Students from BZU and KU Leuven are currently developing proposals for Al-Bireh Downtown, Qufr Aqab, and Qalandya, focusing on climate-resilient and inclusive design.
- **Knowledge Exchange:** High-level exchange visits for **PENRA staff** to Belgium are scheduled for 2026. This will allow for exchange with Palestinian officials on European best practices in building-energy performance, super-ESCO governance, passive-building standards and solar cooling technologies; enable direct exchanges with public agencies, private ESCOs, housing advice centers and on-site demonstration projects; strengthen PENRA's ongoing collaboration with Enabel on the adaptation of Brussels-Capital Region's BEP software and the formulation of Palestine's forthcoming National Energy Efficiency Action Plan (NEEAP III).
- **Infrastructure Preparation:** Detailed design and preparations for the construction of the Al-Bireh Green Corridor are underway, allowing for a tangible implementation of the winning design concepts, validated by professional and civic juries.

4. Sustainability & Future Strategy

The intervention aims to institutionalize green practices at both the national and municipal levels.

- **Institutional Ownership:** By embedding the BEP tool within PENRA and the Green Corridor guidelines within MoLG, the project ensures these standards outlive the funding cycle.
- **Educational Legacy:** The curriculum development at Birzeit University ensures that the next generation of Palestinian architects is trained in climate-smart planning.
- **Scalability:** The Al-Bireh corridor serves as a "Living Lab." Successful designs and processes will be codified into a "Public Space Design Guidelines Manual" for replication in other clusters like Nablus and Hebron.

Partners: Palestinian Energy & Natural Resources Authority (PENRA), Ministry of Local Government (MoLG), Birzeit University (BZU), KU Leuven, Al-Bireh Municipality, and the Engineers Association.